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The Child's Right to Play

IPA USA 2026 White Paper

USA IPA

American Association for the Child's Right to Play

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Executive Summaries

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The Method, Strategies, and Principles of Play

Play is a powerful vehicle for learning, development, well-being, and human flourishing. Yet supporting meaningful play requires an understanding of the principles, environments, relationships, and pedagogical approaches that help children thrive. The articles in this category explore a wide range of play-based methods and strategies that support children's cognitive, social, emotional, creative, spiritual, and physical development. From loose parts, process art, storytelling, literacy, and outdoor learning to therapeutic play, social-emotional learning, risk-taking, and Reggio-inspired practices, these authors demonstrate the many pathways through which play fosters resilience, belonging, curiosity, and growth. Grounded in research and practical application, the articles provide educators, families, researchers, and practitioners with insights, tools, and approaches for creating environments where play can fulfill its transformative potential and support every child's right to learn, develop, and flourish through play.

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Reading for Resilience: Using Children's Literature to Support Early Childhood Mental Health

Marjorie Cole, MEd, President, IPA – Canada

In Canada, young children are growing up in the long shadow of widespread social and emotional disruption. The COVID-19 pandemic altered routines, relationships, and early learning environments during critical stages of development, and many of its effects—such as increased anxiety, delayed social skills, and family stress—are still being felt (Mental Health Commission of Canada, 2023). At the same time, children continue to face challenges related to grief, housing insecurity, economic pressure, and changes in family life (Government of Canada, 2022). These experiences are appearing in early childhood settings as emotional dysregulation, withdrawal, and difficulty with relationships. Similar patterns are observed internationally, making this a shared global concern (Masten & Barnes, 2018). Yet early childhood educators are often given limited training or resources to respond to these growing mental health needs (Shulman, 2016).

Children's literature offers a simple, affordable, and developmentally appropriate way to support young children's emotional wellbeing. Through stories and shared reading, children can safely explore emotions, build coping skills, and feel less alone within the supportive framework of play-based learning (Kumschick et al., 2014; Reach Out and Read, 2023).

Introduction

The early years of life are a time of rapid emotional, social, and brain development. During this period, children learn how to understand feelings, form relationships, and feel safe in the world. These early emotional experiences lay the foundation for mental health across the lifespan (Masten & Barnes, 2018). When young children feel supported and emotionally secure, they are better able to learn, play, and connect with others. When they feel overwhelmed, frightened, or alone, their development can be disrupted in ways that last for years (Shulman, 2016).

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Recent years have highlighted that young children are experiencing more stress than ever before. Family changes, economic pressure, illness, community stress, and the lingering effects of the COVID-19 pandemic have all increased emotional strain on children and caregivers (Mental Health Commission of Canada, 2023). Many young children are now showing signs of anxiety, grief, emotional dysregulation, and difficulty with relationships (Government of Canada, 2022).

However, many early childhood environments are not equipped to respond to these needs in developmentally appropriate ways. Mental health support is often limited, and young children cannot benefit from traditional therapy that relies on talking and insight (Masten & Barnes, 2018). Young children need something that fits their world of play, imagination, and stories.

Children's literature offers exactly that. Stories give children a way to explore emotions, challenges, and relationships through characters and imagination. When educators use books intentionally, they can help children feel seen, understood, and less alone. In play-based early learning settings, story time is already a daily routine. Shared reading should be recognized as a powerful mental health support for young children (Kumschick et al., 2014; Reach Out and Read, 2023).

Conclusion and Recommendations

Children's mental health begins in the earliest years of life. When young children feel safe, understood, and emotionally supported, they can better learn, form relationships, and handle challenges (Masten & Barnes, 2018). Children's literature offers a simple, powerful way to support this emotional development (Kumschick et al., 2014).

Books help children make sense of their feelings, see that others struggle too, and imagine ways to cope. When reading is combined with play and caring relationships, it becomes a form of emotional care (Reach Out and Read, 2023).

Recommendations:

1. Early childhood programs should recognize shared reading as a mental health support, not just a literacy activity.

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2. Educators should receive training on using books to support emotional development and regulation.
3. Childcare centres and other early learning environments should build diverse collections of books that include stories about feelings, loss, change, and resilience.
4. Encourage story-based play as part of daily routines.
5. Policies and funding should support mental-health-informed literacy programs in early childhood settings.

By placing stories at the heart of emotional support, we can help young children grow into more resilient, confident, and connected individuals.

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Play is a Powerful Therapeutic Tool

Mina Dilip, MSc, Play Therapist

Introduction

People tend to dismiss play as mere leisure. Some cultures view play as a waste of time. However, emerging trends in psychology and neuroscience demonstrate its profound role in healing and recovery. This white paper explores the healing power of play as a therapeutic tool, highlighting its impact on trauma recovery, nervous system regulation, emotional healing, resilience-building, and the development of social skills. Using a case-study-based backdrop of field evidence and cross-cultural perspectives, this white paper aims to provide practical recommendations for practitioners, institutions, and policymakers. By framing play as an essential component of health care, this paper calls for systemic recognition and investment in play therapy as a critical intervention, not only for children but also for adolescents and adults.

Conclusion

Healing does not always come through heavy conversations or analytical insight. Sometimes, it comes through laughter, imagination, and the simple act of play. Play is a quiet revolution. It does not demand; it invites. It does not pressure; it opens. It does not lecture; it allows. For children, adults, families, and communities, play is not a luxury—it is a lifeline.

Reclaiming play is not about escaping reality; it is about transforming it. It is about finding safety in chaos, joy in despair, and connection in isolation. In a world that demands seriousness, choosing to play may be the most radical act of healing we can do.

The call to action is urgent: invest in play therapy, train practitioners, adapt culturally, and advocate for systemic recognition. By honouring the healing power of play, we honour the most natural pathway to recovery and well-being.

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Unlocking Potential: The Transformative Power of Loose Parts Play in Early Childhood Education

Michelle Fazio-Brunson, EdD, Northwestern State University of Louisiana; Cynthia DiCarlo, PhD, Louisiana State University; April Giddens, EdD, Northwestern State University of Louisiana; & Omar Vigo, PhD, Louisiana State University

Introduction

This white paper explores the benefits of loose parts play in early childhood education. It addresses the problem of limited opportunities for children to develop crucial cognitive, social-emotional, and physical skills through open-ended play-based experiences. Drawing on research and practical applications, it proposes implementing loose parts play to foster creativity, problem-solving, and overall development in young learners, supporting their right to play (Gibson et al., 2017). Despite decades of research supporting the benefits of open-ended play, opportunities for loose parts experiences remain limited in many early childhood settings. Yet in practice, these opportunities remain unevenly implemented, with many programs still relying heavily on structured, adult-led activities.

Conclusion/Recommendations

Loose parts play is a powerful approach to early childhood education, offering measurable benefits in approaches to learning, cognitive growth, social-emotional well-being, and physical development. Young children are naturally curious, driven to explore, and eager to test ideas. When given open-ended materials, they investigate cause and effect, experiment with spatial relationships, and innovate through hands-on experiences. These opportunities allow children to build independence, develop resilience, and demonstrate their knowledge in ways that are developmentally appropriate and personally meaningful.

In an educational climate that increasingly prioritizes standardized outcomes, loose parts play is a vital reminder of the value of process over product. It affirms the importance of unstructured, child-led exploration as a core component of learning, not an optional extra. By providing children with environments rich in diverse, open-ended

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materials, educators can support agency, creativity, and lifelong learning skills while honoring children's right to play.

Recommendations for Implementation

- Offer developmentally appropriate materials and open-ended activities that allow time for sustained discovery throughout the daily schedule.
- Provide a wide range of discovered, recycled, and natural materials with varied textures, sizes, and shapes to stimulate creativity and sensory exploration.
- Design indoor and outdoor loose parts play spaces with accessible storage to foster independence and autonomy.
- Invest in professional development focused on engaging, intentional ways to integrate loose parts play into curriculum and routines.
- Partner with families by requesting safe, appropriate materials and sharing strategies for using loose parts at home.
- Document learning through observations, photographs, and examples of children's work to communicate the value of loose parts play to families, administrators, and policymakers.

When implemented thoughtfully, loose parts play benefits every child and strengthens the quality of early learning programs. It is both an educational strategy and a statement of belief that children deserve the freedom, time, and materials to explore, create, and grow. By embracing loose parts play, educators, families, and policymakers commit to fostering environments where every child can explore, create, and grow — and to shaping an educational culture that values curiosity, agency, and the right to play.

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This is Your Brain on Stories: Make-Believe Play, Fairy Tales and Resilience

Stephanie Goloway, EdD

Introduction

Make-believe play. Pretend play. Dramatic play. No matter how we label the ephemeral story creation of childhood, two things remain constant: its omnipresence in childhood, and its critical importance to healthy development across all domains. Yet, like play in general, this powerful weaving of symbols, social interaction, and whimsy is in decline. The same can be said for another bastion of make-believe, fairy tales. Parents and teachers often reject these ancient tales as frightening and inappropriate for children.

In this paper, I'll examine recent neuroscience on the developmental significance of fairy tales and storytelling, and how this relates to make-believe play. I will suggest implications for the neurodevelopmental adaptive capacity for resilience. I offer strategies for encouraging rich, imaginative play in all settings, along with a plea to protect the joyful, messy quicksilver of make-believe so children can successfully ride the inevitable waves of change in their worlds.

Conclusion

Make-believe play is a pervasive and universal part of child development. It is an important way for children to develop symbolic thinking, interact with other children, self-regulate, and demonstrate agency and initiative. All of these contribute to the brain's capacity for resilience. In many settings, however, children are not given the time and space to engage in rich, meaningful pretend play.

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Reframing Early Art Experiences: How Process Art Supports Real Learning

Daniele Hunter, EdD

Introduction

The Product Art vs Process Art Debate

Two distinct types of art are most commonly used in early childhood settings. They are product and process art. Product art refers to closed-ended activities with step-by-step instructions and an end result that looks nearly identical for each child (Bongiorno, 2014; McLennan, 2010). Process art, by contrast, has no predetermined end goal (McLennan, 2010), no step-by-step instructions to follow, and an end product unique to each child (Bongiorno, 2014; Capriotti, 2025). Given the differences between product and process art, it is no wonder there has been a longstanding debate in early childhood about which art is right for young children to engage in.

Conclusion

Product art and process art are fundamentally different art forms most commonly found in early childhood settings. This has led to a longstanding debate over which is better for young children. While product art may support things such as following directions and motor skill development, it is often misaligned with children's readiness, limiting their creativity, and is primarily driven by adults. Process art, on the other hand, supports children's naturally unfolding development, promotes higher-level thinking skills, and strengthens children's social-emotional development. Ultimately, the question is not about which type of art is better, but rather which approach aligns with how young children learn.

While children may grasp a concept taught by an adult, their true understanding does not develop unless they have a chance to learn in the way their bodies and brains are designed. This knowledge is built through active, meaningful, and social experiences that let children build on their prior knowledge. You can't pour it into children. As educators, the experiences we offer to young children must align with this belief. When it comes to art, process art supports every part of what young children need for long term learning to happen. It is both physically and mentally active, engaging children's

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bodies and minds as they manipulate tools, think creatively, question, and problem-solve. Process art allows children to work within their current developmental level, building seamlessly off of their prior knowledge with no expectation of meeting a goal they are not yet ready for. Finally, process art lets children think freely, drawing on their social backgrounds and community upbringing to create, imagine, and learn.

While putting this into practice might seem daunting for some, it is essential for early childhood programs. As central members of children's learning, growth, and development, educators must commit to shifting perspectives toward more valuable art practices. These changes don't need to be major; even small shifts can have a significant impact. Beginning with well-stocked art areas, educators can create a space that welcomes process art and the creativity, imagination, and learning it brings. By shifting engagement toward open-ended questions, teachers encourage children to think more deeply about their work. Letting go of unrealistic expectations placed on educators fosters teaching practices that honor each child's natural development. By keeping the goals of the experience in mind above the end result, educators can maintain art experiences that value the learning process and the construction of knowledge. Finally, by celebrating the journey of process art, educators can begin shifting onlookers' understanding, helping them see each milestone in a child's learning journey as a pivotal moment that lays the foundation for ongoing growth and development.

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Part 1: Where Did All The Play Go?
The Play Confusion: When Everything Is "Play," Nothing Is

Debra L. Lawrence, PhD, Professor, Delaware County Community College
Co-President, IPA USA

"The opposite of play is not work — the opposite of play is depression"
(Sutton -Smith 1997, p. 198)

Part 1 focuses on the issues that have led to a deficit in child-led play in early childhood settings and offers ideas for fixing a broken system. It asks: What is replacing child-initiated play?

Part 2 discusses how play continuums have contributed to the issues facing early childhood educators and provides strategies for getting back on track, what to use in assessment, and the tools needed to make learning visible.

Introduction

Children's childhoods have disappeared, and the shift away from child-led play diminishes their engagement and focus, making it hard for them to develop curiosity and explore the world around them. Instead of having the freedom and autonomy to learn through play, childhood has turned into 'getting ready' for a future filled with standardized tests and developmentally misaligned activities.

Children's play is being replaced by SMARTboards, iPads, Chromebooks, YouTube videos, flashcards, worksheets, homework, dance, gymnastics, softball, tutoring, teacher-directed classrooms, and daily schedules organized into small blocks of time that require too many transitions.

The early childhood profession needs to return to what we know works with children. To focus on the science of how children learn. To provide the time, space, relationships, and environment where children thrive. As Bev Bos reminds us, "The Child is the Curriculum" (Saia, 2016). This reminder may encourage educators and administrators to feel hopeful and proactive about restoring meaningful play in early childhood settings.

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To begin this exploration, educators must regain their agency; instead of asking, 'Why is it this way?' they must use their power to say, 'There is a better way to provide early childhood education.' Early childhood professionals must push back against 'readiness' pressures and unrealistic academic expectations that do not align with children's development, and share with families and administrators why child-led free play is how children learn. Advocating for this shift is essential for meaningful change in early childhood practices and for the profession to become *developmentally focused* rather than *planning activities that meet state standards*.

Conclusion

What You See, Feel, and Hear in the Setting.

Whatever the setting, what children see, how they feel, and what they hear all affect their development. What a teacher sees, feels, and hears also impacts the teacher. Children and teachers come from different cultural backgrounds, which can make children feel less safe or feel that their culture is not valued. Teachers need to be aware of how their cultural experiences may affect their ability to form loving, positive relationships. Here are a few things to consider. When you walk into your setting, does it feel welcoming to families and children? What does it smell like? Are there areas to get away? Is it comfortable?

What do children see? Is it visually overstimulating? Is it cluttered? Do you have enough materials for groups of children to play together? Is your daily schedule based on the clock or on the children?

What do you hear? Loud music or just music all the time? What type of music, yours or the children's? Do you hear crying and fighting, loud teacher voices, toys being dumped, chaos? If you hear this, the children are frustrated because you are too structured and they do not have enough time to play.

In Part II, the paper discusses solutions and strategies for Part I's problems, describes terms that have confused teachers, and explains how play continuums have been used to trick us into thinking they are play. Part II also compares

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the definition of child-led play with other definitions used to address the readiness movement. Part II guides you to reimagine an environment where children thrive.

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Part 2: Where Did All The Play Go?

The Play Confusion: When Everything Is "Play," Nothing Is

Debra L. Lawrence, PhD, Professor, Delaware County Community College
Co-President, IPA USA

Part 1 focuses on the issues that have led to a deficit in child-led play and offers ideas for fixing a broken system. It asks: What is replacing child-initiated play?

Part 2 offers strategies for getting back on track, a clear definition of child-led play, ways to assess children's development, scenarios, and the tools needed to make learning visible.

Introduction

Play has become confusing. To cater to the "readiness movement," early childhood teachers are bombarded with different terms used to describe play, or what others have called play-hijacked terms (Pyle & Danniels, 2017; Hughes, 2012; Sands, 2016). Have you heard of any of these? We play with a purpose; we play to learn; we use play-based strategies.

Recognizing that these terms dilute and erase play from early childhood will begin to rectify years of readiness preparation and return home and early childhood settings to places where children's laughter, joy, excitement, and curiosity can be felt, seen, and heard. Teachers and parents need the confidence and knowledge to push back on those who believe play is frivolous and only a break from learning (Yogman et al., 2018). When early childhood professionals see the value of child-initiated play, they can regain the joy and excitement of watching children's learning unfold during play.

Conclusion

Pushing Back and Reviving Child-led Play/Free Play

Redefining the role from teacher to play facilitator is how to institute child-led free play. Here are some tips to get you started.

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- A facilitator who acknowledges that children are capable rather than needing teacher guidance and control, and who recognizes and values child-led play as a biological necessity rather than a break from learning.
- Is aware that children's chronological age does not align with their developmental age and uses the Centers for Disease Control and Prevention (2025) to determine each child's development.
- Makes learning visible to parents and administrators by using authentic assessment strategies, work samples, photographs, documentation boards, running records, and other artifacts.
- Uses knowledge gained through observations to enhance the environment based on children's emerging interests or inquiries
- Uses these interests as the source for a project or study, moving away from purchased or teacher-determined curriculum or repetitive monthly themes.

In Part I, you have been given some reasons for the play deficit.

In Part II, you have been given some strategies for pushing back. These papers do not cover all the reasons early childhood educators struggle to provide child-led free play. If this topic interests you, there are many more authors in the 2026 IPA USA White Paper and in the 2024 IPA USA White Paper. These are excellent resources for you and can be found at IPAUSA.ORG/WHITEPAPER

The Case for Play

An important next step is to gather the language you feel comfortable using to "push back" on what harms children's development and "push in" on child-initiated free play. Frame them, and put them up on walls or in the hallway so visitors and families can see why child-initiated FREE play is how children learn.

The following resources are just the beginning of your journey to protect childhood. Included are quotes from theorists that describe how child-led play is a biological necessity for building the foundations of future learning. Myths about play and school readiness, and a link to the U.N. Article 31 on the rights of the child to play.

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Information from the American Academy of Pediatrics about child-led play. Some of these suggestions are also on the Reference page.

- PowerPoint of my slides from theorists. I have permitted you to edit -PowerPoint Slides of Theorist Quotes
- Myths about Play and School Readiness- Please note my description of where I got these and verify before using.
- The United Nations Convention on the Rights of the Child (UNCRC) recognized childhood as "a special, protected time, in which children must be allowed to grow, learn, play, develop and flourish with dignity." Article 31 states, "Every child has the right to rest, relax, play and to take part in cultural and creative activities.... Children also need leisure, defined as time and space without obligations, entertainment, or stimulus, which they can choose to fill as actively or inactively as they wish" (United Nations, 1989, Article 31).
- Pointer (2026, para. 1): "Play is crucial for supporting healthy development; promoting stable, nurturing relationships; and mitigating toxic stress. A child's play experience can impact their physical, mental, and social-emotional health outcomes."
- In 2025, the American Academy of Pediatrics reaffirmed a 2018 clinical report, The power of play: A pediatric role in enhancing development in young children. *Pediatrics*, 142(3), Article e20182058, by stating, "Child-led play is a singular opportunity to promote the social-emotional, cognitive, language, and self-regulation skills that build executive function and a prosocial brain. Furthermore, play supports the formation of the safe, stable, and nurturing relationships with all caregivers that children need to thrive." That play builds executive functioning. "Play is not frivolous: it enhances brain structure and function and promotes executive function (ie, the process of learning, rather than the content), which allows us to pursue goals and ignore distractions," and warns that when play and safe, stable, and nurturing relationships are missing, "toxic stress can disrupt the development of executive function and the learning of prosocial behavior, (para 1-3).

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- The American Academy of Pediatrics describes child-led play as essential to cognitive, language, physical, social, and emotional development, along with positive, loving, and consistent relationships as children play (Ginsburg, 2007).
- Bruce Perry (2001) discussed how play contributes to children's understanding of the world around them. With the school readiness movement focused on academics, Perry reminds us that a child's curiosity and active exploration of the environment fuel development. As this cycle repeats, children's curiosity and motivation grow stronger.
- To see how the brain creates connections, examine how neural pathways develop. Free play creates these neural connections, promoting development across physical, social, emotional, and cognitive abilities. Free play wires the brain for the skills we will use throughout life. These skills include "physical agility, social confidence, emotional regulation, creativity, and resilience(Brown & Vaughn, 2009)
- Ginsburg (2007) explains the benefits of child-initiated play, describing opportunities to use creativity, imagination, and physical, cognitive, social, and emotional strength, which are development's building blocks.
- In the book Play Across All Spaces, edited by Erin Casey and Courtney Dewhirst (2026), we gain more insight into why child-led play is a biological necessity for young children's healthy development.
- Panksepp states that "play is not just something that keeps kids busy, but instead 'activates fundamental biological systems that support learning and development,' p. 5.
- Panksepp (2007) reminds us that brains are wired for play, which allows us to adapt to new experiences. Panksepp (2007 continues by stating that play allows the brain to adapt to new experiences.
- Pellis and Pellis (2009) describe how child-led play stimulates development in the areas responsible for executive function and social and emotional development.
- Porges (2009 describes how play supports our ability to handle stress and connect with others when children's play promotes enjoyable interactions.

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- Stuart Brown (2014), a leading psychiatrist, author, and founder of the National Institute of Play, discusses how play deprivation disrupts normal development of social, emotional, and creative problem-solving and can carry serious consequences for the individual and the public.
- Children's development: NAEYC (2020) explicitly establishes in Principle 1 that all domains of child development—cognitive, physical, social, and emotional—are interrelated and interdependent, meaning development in one domain influences and is influenced by development in other domains.
- Transcript of Peter Gray's Podcast.
- Schamuhn, T. (2024, November 6). The Power of Play with Peter Gray [Episode 105]. The Child Psych Podcast. Spotify/Publisher. https://open.spotify.com/episode/4bB2tJtVPBB1krFtzxPlA5?si=FVx4iGCiRIeLmkQv3AogVQ

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Explorers and Detectives: The Multimodality of Children's Literacy Development Through Play and the Role of the Educator

Emma Melo, BA

Introduction

The decision to research the topic of children's literacy development through play came about as a request for a faculty professional development on supporting emergent literacy, and my own fascination with how educators in Reggio Emilia refer to the "mysterious signs and symbols" of emerging literacy and numeracy as "the codes" (Chieli, 2025). In 2025, I attended the Students and Professors Study Group, L'approccio educativo di Reggio Emilia, at the Loris Malaguzzi International Center in Reggio Emilia, Italy, to deepen my understanding of Reggio Emilia's innovative approach to early childhood education.

I came to the conference seeking answers to many questions, including how literacy is learned and taught within the Reggio Emilia context, and whether there was any formal preparation for primary school. After three days of attending presentations, studying documentation and artifacts of children's work, visiting schools and ateliers, and conversing with teachers and pedagogistas, it became clear that children in Reggio schools were developing complex literacy skills and habits through play and project work, without formal academic or prescribed curricular instruction. Instead, the teacher's role was to help children "fall in love with the codes," or in other words, to support the journey and natural desire through which children explore, use, play with, and make meaning from the "fascinating and mysterious" marks, signs, and symbols of their culture (Chieli, 2025).

As an ECE practitioner who appreciates the complexity of both children's learning and the role of the teacher behind this simple statement, "falling in love with the codes," I was led to ask the following questions: how do children develop literacy skills and habits through play; how can early childhood educators support emergent literacies and protect play; and, how are children's use of "the hundred languages" as termed by the Reggio approach (Edwards et al., 2012) evidence of developing literacy skills?

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I am the Pedagogical Coordinator at the Highland Presbyterian Church Nursery and Weekday School in Louisville, KY, USA, where I facilitate emergent and contextual curriculum, project work, and professional development. I am also a faculty member in the children's program at the Louisville Ballet School and a lifelong dancer. I am an early childhood education professional, an advocate for children's rights, and a promoter of the arts. I firmly believe that the early childhood years are the most important time for the development of the human brain and body, and that the early childhood educator plays a crucial role in supporting and facilitating this growth. As an artist and educator who embraces the pedagogical philosophy of "The Hundred Languages of Children" (Edwards et al., 2012), I know firsthand the value and legitimacy of human expression through multiple modes and media. I also believe the professions of ECE and arts education are undervalued and under-supported, and I aspire to amplify the voices and work of children and educators who have historically been unheard and unseen.

In researching this topic, I selected publications mostly from the last five years within a constructivism paradigm that aligns with my teaching and learning philosophy. I also chose postmodern research paradigms that challenge dominant, narrow, or static thinking. The methods and tools used to collect and interpret data (Mueller et al., 2024) are familiar to my pedagogical practices of observation and documentation.

Conclusions

The idea of "teacher as researcher" has become a major focus of my workplace professional development. We have collectively continued this study of early literacy by co-constructing knowledge through examining our practices and documentation, consulting external resources, and participating in hands-on learning opportunities. I continue to research how play in early childhood builds reading and writing skills, and specifically, how the latest findings can be appropriately applied to early childhood literacy development in ways that protect play and early childhood from academic pushdown. We aim to fill the research gap with our own findings. We must continually align our values and practices with theory to support young children's learning and rights. However, we must guard against complacency and be willing to challenge

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dominant powers, rather than become overly reliant on research while ignoring the evidence before our own eyes.

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Children's Right to Play: Nurturing Social-Emotional Learning (SEL) Through Play in Early Childhood

Lin Moore, PhD, Texas Woman's University &
Elaine Zweig, PhD, Educational Consulting

Executive Summary

Play serves as an essential pathway for children to develop social-emotional learning (SEL) by enabling them to acquire social competencies through joyful, self-directed engagement. The Collaborative for Academic, Social, and Emotional Learning (CASEL) outlines five core competencies—self-awareness, self-management, social awareness, relationship skills, and responsible decision-making—which are each uniquely supported by diverse play types. Specifically, sensory play builds self-awareness and confidence, while physical play fosters self-management and perseverance. Furthermore, imaginative play and games with rules develop social awareness and empathy; construction play hones relationship skills through cooperation; and exploratory and nature-based play promote agency and responsible decision-making.

To realize these benefits, playful experiences must occur within nurturing relationships and safe environments that reflect children's diverse cultural and linguistic backgrounds. Adults facilitate this by providing the necessary space, time, and materials for both free and guided play. Finally, successful SEL integration requires stakeholders to recognize play as a fundamental right. Including policies necessitates ensuring ample time for play, specialized teacher preparation, and adequate funding for materials that support the development of the whole child.

Introduction

The recent focus on the critical value of social-emotional learning for young children requires a re-examination of the role of play in supporting whole-child development (OECD, 2021; The Lego Foundation, 2018). Social competencies are a set of social, emotional, and cognitive skills that allow children to interact successfully with peers and adults (Ecological Approaches to Social Emotional Learning Laboratory,

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2024; Schmidt, 2019). The prefrontal cortex manages these skills and takes time to learn and apply appropriately across various settings (Bergen, 2007; Springer, 2020). Early childhood educators, parents, and caregivers, as caring adults, are uniquely positioned to provide opportunities for children to acquire and practice social competences through playful learning.

Conclusion

Children need joyful, playful learning to develop social competencies and emotional well-being. It is time for adults to stand up and advocate for children's right to play at home, in their communities, and in their school and educational settings.

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Is Risk the Reward? Toward an Emphasis on Risk-Taking and Decision-Making in Play and Learning Spaces

Alissa Rupp, FAIA

Introduction

To thrive in an ever-changing world, children develop and improve their ability to adapt. Adapting successfully requires trying new things, preferably in a context where "failure" is survivable. The instinct to protect children from failure is strong, so adults often shield children from contexts perceived as risky. Yet this can limit children's opportunities to adapt or learn from bad decisions when the stakes are low (Vedantam, 2025) and thus leave them unprepared when the stakes are higher. Children's museums provide a unique environment where parents trust that children are safe; children encounter new challenges in a playful space; and adults and children alike learn how to react to mistakes or failures (Rupp et al., 2023). With this in mind, museum professionals and others who are focused on learning through play must encourage children to assess—and take—risks.

This paper will discuss how children's risk-taking and risk-assessment relate to the development of core competencies and resilience. The overarching mission of children's museums—encouraging learning through all types of play—may also set the stage for children to become better decision-makers and face challenges with confidence.

Conclusion/Recommendation

Risk is the Buzz Word; Growth is the Point. So, while there is a lot of buzz about risk, the idea posited here is that taking risks is not the point of the play, or of the learning. *Growth* is the point. Developing diverse competencies is the point. Risk is meant to be mitigated, competency builds over time, and decision-making is a skill that bridges the two. Assessing the results and consequences of our decisions is how we grow (Keeler, 2020). But it is a process: when we see videos on social media of small children competently using a very sharp tool, or handily starting and using a cooking fire, or fluidly playing an instrument in front of hundreds of people, or expertly climbing a tall

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rock face, what we are seeing is actually a low-risk situation. We are seeing a situation where someone—probably an adult who cares about them—helped that child develop their skills, making the activity the child was undertaking *less risky*. The younger person took on what they could and grew into the skill. At the point of the viral video, what the child could take on might indeed be high stakes; that is, something quite bad could happen. But if something is high-stakes, that is the best reason for it to be low-risk. That high-stakes situation is now within that child's capabilities because they feel competent, know their boundaries, make informed decisions in the moment, and will be resilient if things do not go as planned. And children's community, we hope, will be there for them no matter the outcome.

Work in this area with children and youth has significant societal implications. In his far-reaching discussion of gun violence in the United States, Jens Ludwig (2025) describes a range of dangerous situations faced by youth. Each emerged from a relatively short, intense interval, in which a series of very bad decisions were made by one or more of the young people involved. When youth are navigating stressful conditions in their day-to-day lives and then face a physical or emotional challenge they cannot manage or avoid, good decision-making (or "self-interruption") can prevent a disastrous outcome. However, if we combine such a situation with access to a firearm, the heat of the moment can easily result in a fatal decision before any cooler heads or helpful bystanders can prevail. In such a moment, the stakes are indeed very high; there are extreme risks, and the competencies required—diffusing a situation, calming oneself, resisting the urge to be drawn into rage—may not be readily at hand (Ludwig, 2025).

Children's museums, like many youth-centered organizations, help children grow by encouraging them to take calculated risks and expand their intellectual, physical, and emotional horizons. Exhibits and programs that include child-led, intergenerational play can build decision-making muscles while building actual muscles and create internal as well as physical strength and well-being. We can help children (and adults!) learn some of those life skills through play, friendship, and community. Let's continue to help all children assess and mitigate risks and make good decisions, even when the

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stakes are high, so they can do what we really want them to do: become happy, healthy, competent adults.

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Play, Spiritual Development, Spiritual Flourishing

Deborah Schein, PhD

Introduction

Understanding the relationship between play and Spirituality in early life is essential, as it informs the role of play in development. The concept of play resonates across all ages. However, questions remain regarding how infants engage in play, what they experience during play, and how play and spirituality interact. Most importantly, it is necessary to consider why this relationship matters.

Conclusion

Parents and educators serve as models of Spirituality and create environments where children can experience their own joys. This approach involves being present with children without interrupting, overshadowing, or directing their actions, observations, or inquiries. The emphasis is on sharing in children's self-discovered moments. Adults are also responsible for providing environments, materials, and tools that support children's spiritual exploration and interactions. Achieving this requires a deep understanding of each child's disposition and what resonates with them (Holman & Schein, 2024). Furthermore, adults model spirituality by experiencing and sharing their own moments of wonder, awe, joy, and inner peace with children and others.

This perspective parallels Montessori's concept of the *absorbent mind,* wherein children rapidly and effortlessly assimilate experiences from their environment. Through this process, children construct their identities (Montessori, 1949 as cited in Claremont, 1967). From birth, children possess the capacity to absorb information from their surroundings (Prowant, 2023). It is essential to recognize that children are not simply undeveloped adults; they possess unique skills and intrinsic abilities that warrant acknowledgment and respect.

Contemporary neurological research demonstrates that young children can perceive and recall minute details due to the active role of dendrites in processing new information from both immediate experiences and the environment (Carlson, 2006; Gopnik et al., 2001; NAEYC, 2005; Shonkoff & Phillips, 2000; Siegel & Hartzell, 2003;

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Vygotsky, 1962). Research in Spirituality further supports these neurological findings, indicating that all humans possess an innate spiritual self from birth, which must be recognized and nurtured throughout life to enable flourishing (Miller, 2021).

Parents and educators should consider these findings, as they are responsible for creating experiences and environments that foster meaningful spiritual moments and opportunities for play. It is important to reflect on what children are actually absorbing from their surroundings. In the context of the digital age and increased technology use among young children, parents and teachers should critically evaluate the value and relevance of screen-based learning for children's spiritual development.

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How Reggio-Inspired Teachers Enact Playful Learning: Characteristics of the Reggio Emilia Philosophy in Practice

Autumn E. Smith, MEd & Cynthia F. DiCarlo, PhD
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Introduction

The Reggio Emilia approach is an educational philosophy that originated in the city of Reggio Emilia, Italy. Developed by Loris Malaguzzi and described as "a philosophical approach focused on listening and respecting children and their potential by witnessing their actions towards reformulating everyday practices, ideas and projects" (Santín & Torruella, 2017, p. 50). The first Reggio school, established in 1963, placed great emphasis on nurturing relationships between adults and children while fostering environments rich in opportunities for play, exploration, and discovery. Santín and Torruella (2017) note that arts education models in Reggio schools support self-expression, communication, and critical thinking—often expressed through playful interaction. In contrast to more rigid early childhood programs, the Reggio philosophy views the child as an artist, scientist, and active participant, without limiting creative or playful processes.

The philosophy, guided by eight core tenets, the philosophy integrates child-led play.

1. **The Environment as the Third Teacher** – Spaces are intentionally designed to invite playful exploration, experimentation, and creativity, allowing the environment itself to partner with play-based learning.
2. **100 Languages of Children** – Children communicate and make meaning through many forms of play: dramatic play, building, drawing, dance, music, storytelling, and scientific exploration.
3. **Long-Term Projects** – Often emerging from children's play interests, these projects allow extended engagement in imaginative narratives, problem-solving, and collaborative construction.

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4. **Teacher-Researcher** – Teachers observe and participate in children's play to better understand their thinking, interests, and learning processes, using play as a key context for inquiry.
5. **Image of the Child** – Children are viewed as capable, curious, and resourceful, with play seen as a powerful medium for demonstrating competence and agency.
6. **Negotiated Learning** – Learning goals and play themes are co-constructed between children and adults, allowing for shared ownership and direction of the play experience.
7. **Documentation** – Photographs, transcripts, and artifacts of children's play are collected and displayed, making learning through play visible to children, educators, and families.
8. **Social Relations** – Play is recognized as a social act that builds relationships and shared understanding among children, families, and educators.

Together, these tenets position play not as a separate activity but as the foundation of learning in Reggio-inspired environments. By integrating play into all aspects of curriculum and interaction, the approach affirms both developmental research and Article 31 of the United Nations Convention on the Rights of the Child, which asserts that every child has the right to rest, leisure, and play.

Conclusion

This case study aimed to identify characteristics of the Reggio Emilia philosophy in practice. Participating educators described this philosophical approach in their own words. Overall, the themes determined from the participants' responses largely mirrored the tenets of the approach as described by Santín and Torruella (2017), with many responses underscoring the role of play as a central mode of learning and interaction in Reggio-inspired classrooms.

The most prevalent theme generated from the coded responses was **Child-centered**. We recorded 40 instances of codes contributing to this theme, including *child interests*, *respect for the child*, *support for the child*, and the *child is*

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competent/capable. The codes recorded under this theme reflect the fifth tenet of the Reggio Emilia philosophy, *Image of the Child*. According to Santín and Torruella's (2017) definition, the child is a "powerful, competent, creative, curious, full of potential and ambitious entity" (p. 53). This view positions children as active agents who shape their own play experiences, using play to explore ideas and construct knowledge. As Dodd-Nufrio (2011) notes, the Reggio Emilia classroom is "an environment that allows the child to be a producer of culture and knowledge – the child is a knowledge maker" (p. 236). Participants described play, particularly self-directed play, as a key avenue for children to express agency, test ideas, and engage deeply with peers and materials.

Another theme participants identified was **Learning from the environment**, with 16 code instances. Codes included *'natural environment' and 'environment' as the third teacher*. This theme corresponds with the first tenet of the Reggio Emilia philosophy, *The Environment as the Third Teacher*, which holds that "teachers organize the space in a way that is inviting for students to explore, experiment and investigate" (Santín & Torruella, 2017, p. 53). In practice, this often translates into environments designed for open-ended, playful exploration—such as loose parts, natural materials, and outdoor spaces that invite imaginative play and collaboration. The philosophy's socio-constructivist foundation supports this connection, emphasizing that "both children and adults co-construct their knowledge through interactions with people and the environment" (Dodd-Nufrio, 2011, pp. 235–236). Nature-based play, in particular, was seen as promoting belonging and community connection (Omidvar et al., 2019).

The third theme, **Documentation**, included 10 instances of codes such as *Documentation* and *reflection*. This theme aligns with the seventh tenet of the Reggio Emilia philosophy, where Documentation serves as a way to "present and represent the experiences, thoughts and ideas of the students and to showcase their learning processes" (Santín & Torruella, 2017, p. 53). Participants often described documenting children's play as a way to deepen learning—using photographs, transcripts, and artifacts from play episodes to revisit ideas, extend narratives, and make children's thinking visible. Hart (2006) emphasizes that in the Reggio approach, Documentation not only records the history of a project but also guides play-rich learning experiences.

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Inquiry, the fourth theme, had nine code instances (*inquiry/inquiry-based* and *explore and experiment*). These playful investigations often began as spontaneous interactions with materials or environments and evolved into structured explorations or collaborative problem-solving. Inan, Trundle, and Kantor (2010) confirm that the Reggio approach is "grounded in inquiry, values play, embraces a constructivist and social-constructivist approach to teaching and learning" (p. 1187–1188). Play provided a natural context for posing questions, testing hypotheses, and refining ideas through trial and error.

The fifth theme, **Observation**, emerged from codes such as *'observation'* and *'teacher-researcher'*. This theme corresponds with the fourth tenet of the Reggio approach, which emphasizes that "the teachers' role is not reduced only to provide information to students, but to listen, observe and to document the work of children" (Santín & Torruella, 2017, p. 53). In participants' descriptions, Observation often took place during play, as teachers used children's play behaviors, conversations, and problem-solving strategies to understand their thinking and plan future experiences. This data aligns with Hart's (2006) framing of Observation as part of a reflective process that is integral to supporting rich, playful learning environments.

The sixth theme, **Collaboration**, was associated with codes such as *learning with others* and *communication*. This theme reflects the eighth tenet, *Social Relations*, which positions children as active social actors in co-constructing knowledge (Santín & Torruella, 2017). Participants described play as a powerful context for collaboration, from negotiating game rules to building a shared structure or acting out a story together. Such collaborative play fosters communication, empathy, and teamwork—skills essential for lifelong learning.

Finally, **Community**, the seventh theme, was associated with *community involvement* and *cooperation among teachers, children, and families*. This data aligns with the Reggio view of education as a community-based philosophy (Hart, 2006). Participants noted that play-based projects often incorporated family and community engagement, blurring the lines between classroom and home and reinforcing learning as a shared, relational process. Involving families in children's play experiences also

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reflects the philosophy's emphasis on respect for parents as partners in the educational journey (Altan, 2019; Yıldız & Durmuşoğlu, 2018).

Across all themes, participants' descriptions reinforced that play was not an optional activity but an integral process in Reggio-inspired environments—an avenue through which children explore, question, collaborate, and connect with others. These findings affirm that play in Reggio contexts is deeply purposeful, blending joy, creativity, and inquiry to support holistic development while honoring children's rights under Article 31 of the United Nations Convention on the Rights of the Child.

This study addressed the research question, "How do Reggio practitioners define the Reggio-inspired approach?" An analysis of the participants' descriptions of the Reggio Emilia approach revealed seven distinct themes. These themes are *Child-centered*, *Learning from the environment*, *Documentation*, *Inquiry*, *Observation*, *Collaboration*, and *Community*. While each theme relates to one of the eight core tenets of the Reggio approach (Santín & Torruella, 2017), three tenets were not represented in the participants' responses. The tenets of the Reggio Emilia philosophy not expressed in these final themes were *100 Languages of Children*, *Long-Term Projects*, and *Negotiated Learning*. Future research could explore why these three tenets were absent from participants' descriptions of their Reggio-inspired practices and whether Reggio-inspired educators understand or implement them less consistently.

Limitations

One limitation of this study is that the collected demographic data did not include participating teachers' locations. Although the questionnaire was designed in English, this does not mean participants teach in English-speaking schools. Because it was disseminated online, the questionnaire may have been accessible to an international audience. Additionally, the demographic data did not capture the ages of the participating teachers. Collecting this demographic information could have shown the prevalence of the Reggio-inspired approach across age groups, education level, years of experience, and regions.

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Clinical Implications

This study aimed to identify teachers' perspectives on the Reggio Emilia philosophy and examine how they enact this approach in practice. Seven key characteristics emerged—Child-centered learning, Learning from the Environment, Documentation, Inquiry, Observation, Collaboration, and Community—each reflecting play's central role in exploration, meaning-making, and relationship-building.

The findings provide a practical framework for educators, administrators, and teacher trainers seeking to design and sustain environments that honor children's right to play. By recognizing play as the primary context for Reggio-inspired learning, educators can intentionally create spaces and experiences that support autonomy, creativity, and collaboration. Documentation and Observation of play can guide curriculum decisions, while environments rich in natural, open-ended materials can extend opportunities for inquiry and imagination.

For professional development, these results highlight the importance of preparing educators to facilitate play-based learning that is child-led yet skillfully scaffolded, ensuring that play retains its integrity as a joyful, self-motivated process. Beyond the classroom, the study underscores the need for policy-level advocacy to protect and promote children's right to play, as articulated in Article 31 of the United Nations Convention on the Rights of the Child.

In alignment with the International Play Association's mission, these findings reinforce that play is not an "extra" but an essential component of quality early childhood education. Embedding play deeply into practice is both an educational imperative and a matter of upholding children's rights.

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Phenomena-Based Play in the Outdoors

Brian A. Stone, EdD

Introduction

Outdoor play is essential to a healthy, well-balanced life. When children have regular opportunities to explore, wonder, create, imagine, and authentically play in outdoor settings, they benefit across multiple domains, including physical health, social interaction, emotional regulation, executive functioning, and sustained attention (Yogman et al., 2018). Much of the research suggests that time outdoors tends to increase physical activity, build imagination and creativity, and support whole-child development. However, today's competing indoor/screen routines often displace or diminish those gains (Larson et al., 2019).

A key advantage of outdoor play is the meaningful opportunity it provides to interact with real-world phenomena, events, or patterns that students can observe and explain (e.g., water flowing downhill, shadows shifting, ice melting, leaves falling, insects foraging, or wind moving objects). The Next Generation Science Standards (NGSS) define *phenomena* as occurrences in the natural or designed world that students can explain or predict using scientific knowledge (NGSS Lead States, 2013). Anchoring learning in such phenomena is central to three-dimensional science because it invites sense-making through practices, core ideas, and crosscutting concepts (Achieve & Next Gen Science Storylines, 2016).

This paper uses the term Phenomenon-Based Play to describe child-led, unstructured outdoor play that naturally centers on such phenomena without adult-imposed objectives. In contrast to classroom-based Phenomenon-Based Learning (PhBL), where a teacher selects an anchoring phenomenon to guide instruction, Phenomenon-Based Play relies on discovery and the child's curiosity to drive observation, prediction, testing, and revision of ideas. Research on anchoring phenomena underscores why play provides a critical opportunity for children to engage with the world around them. Authentic anchors are observable, compelling, too complex to explain in a single step, and rich enough to elicit children's questions and investigations (Penuel & Bell, 2016). These are properties that are abundant in everyday

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outdoor contexts. Children need plenty of time and exposure to these "anchors" through their play.

Phenomenon-Based Play represents a powerful, practical response to an overly digital world. By protecting unstructured time outside and resisting the urge to push adult objectives, we preserve children's innate curiosity to meet a world rich with observable phenomena. The result is playful inquiry that builds scientific sense-making while simultaneously supporting the whole child in fostering children who are physically active, socially connected, emotionally resilient, and deeply interested in how the world works.

Conclusion/ Recommendations

Children need less screen time and more play time. They need frequent, sustained time outdoors. They need less direct instruction and more self-generation of knowledge through experience. Teachers will always have a role. Children are not going to "discover" or "self-generate" terminology, but that transmission of knowledge can always come after or alongside experiences as they are built by children. Curiosity is a powerful driving force shared across humanity. Adults need to value this force and provide time for children to explore through their play.

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Design for Play in Early Years

Mugdha Thakurdesai, MArch

Introduction

Curriculum-driven planning has led many schools to adopt conventional classroom-based layouts as a standard architectural response for all age groups, including early years education. This one-size-fits-all approach overlooks the unique developmental and psychological requirements of children aged 0–6. Learning environments that rely heavily on enclosed classrooms and rigid spatial definitions often inhibit play, exploration, and movement, thereby reducing their effectiveness in supporting holistic development. There is a clear need to move away from static, classroom-centric models towards learning environments that are flexible, mobile, and responsive—spaces that enable young children to navigate, explore, and engage with their surroundings as integral parts of the learning process.

Conclusion

The design of early childhood learning environments must be fundamentally reoriented towards play-based learning as the primary spatial and pedagogical framework. Early years facilities should move away from rigid, classroom-centric models and adopt flexible, landscape-based learning environments that support movement, exploration, and child agency. Prioritize integrating semi-outdoor and transitional spaces to ensure climatic responsiveness and year-round usability, particularly in dense urban contexts.

Design frameworks must draw from indigenous spatial typologies, embed nature and sensory experiences as integral learning tools, and allow for adaptability across varying site constraints. Importantly, early years environments should balance safety with opportunities for risk-based play, enabling holistic physical, cognitive, and socio-emotional development. Aligning these design approaches with national education priorities will ensure that early childhood learning environments are scalable, culturally grounded, and developmentally appropriate, laying a strong foundation for lifelong learning.

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Similarly, folk and fairy tales are often pushed from the early childhood environment. These ancient stories of using skill, wit, and courage to overcome adversity are sometimes seen as too fraught with danger and fear to share with children. Neuroscience, however, offers an alternative view: that stories of imagined risk and challenge are exactly what our brains need to prepare us to combat the very real stressors we experience.

Children seem to intuitively know what their brains need, in both make-believe play and in the stories that fuel it. They are drawn to themes of "trouble," even as well-meaning adults try to protect them from it. As play scholar David Kuschner describes it,

"Children's fascination with trouble includes such themes as power, the grappling with good and evil, overcoming adversity and confronting the monsters, real and imaginary, in your world." (Kuschner, 2019, p. 132).

In both their play and in the stories we share with them, we owe it to children to honor this fascination with trouble and risk. Even in settings where opportunities for physically risky play are few, every child can vicariously race down the beanstalk with Jack as he escapes from the angry giant. Beyond inspiring wild, joyful play, folk and fairy tales can set the stage for the neurodevelopmental blossoming of each child's adaptive capacity for resilience. However, this resilience gives every child the best chance of defeating the inevitable dragons they will encounter in life and living happily-ever-after in our challenging, ever-changing world.

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1001 Pathways to Learning Through LEGO® Play Pedagogy
Play as a Vessel for Justice and Belonging

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Introduction

Play is the oldest, most enduring, and most generative learning relationship humans establish with the world. For this reason, play should not be reduced to an activity squeezed into "free time"; rather, it is the child's (and indeed the human being's) way of making meaning of the world, building relationships, structuring thought through trial and error, and expressing the self. This perspective requires that we treat play not merely as a pedagogical method, but as a foundational ground for the nature of learning itself (Tuğrul, 2017, 2019, 2024).

Children's play is recognized internationally as a right. Article 31 of the United Nations Convention on the Rights of the Child guarantees the child's right to rest, leisure, play, and to participate in age-appropriate recreational activities (United Nations, 1989). This framework reminds us that the right to play is connected not only to well-being, but also directly to learning, development, and participation. At the same time, it positions play as inseparable from creativity, imagination, self-regulation, social negotiation, and participation in cultural life (NAEYC, 2022). Key frameworks in early childhood literature and child health strongly emphasize play's role in cognitive, socio-emotional, and self-regulation development (Ginsburg, 2007). Clinical reports from the American Academy of Pediatrics further demonstrate that play deprivation poses risks to children's health, attachment relationships, and motivation to learn. Play is indispensable for healthy child development (Yogman et al., 2018).

This White Paper approaches the pedagogical value of play through the lens of LEGO® Play Pedagogy (Learning through Play) and argues that play is not the opposite of learning, but learning itself. Within this approach, the educator's role is redefined not as "managing" but as opening space; assessment is understood not as measuring products, but as making thinking processes visible. The text offers concrete examples of how this becomes possible through an approach that generates many possibilities with a

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limited number of materials. In doing so, play is addressed not merely as a classroom preference, but as part of how school and learning are positioned-and as part of broader debates on justice and access.

Conclusions and Recommendations

The primary recommendation is the re-legitimization of play in education systems—at both formal and cultural levels-as the language of learning rather than the opposite of learning. This is not merely a change in discourse; it requires redesigning time, space, and assessment mechanisms. The right to play and play-based learning should be positioned as a measurable priority in early childhood policies.

The second recommendation is to treat "accompanying play" as a distinct area of expertise within pre-service teacher education and in-service professional development. Rather than trying to manage play flow, teachers should design safe, accessible, open-ended spaces where play becomes learning; ask questions at the right time, step back at the right time, and interpret the process through observation and documentation. These competencies are core to the sustainability of play pedagogy.

The third recommendation is to shift assessment from product-focused measurement to process-focused interpretation. Observation, documentation, and the child's own narrative should be included as ethical and pedagogical tools in standard practice repertoires to make the learning value of play visible. This enables both teachers and families to read play as an evidence-based learning space.

The fourth recommendation is to strengthen the philosophy of "building more with less" in response to childhood experiences shaped by consumer culture and digital intensity. Creating rich thinking possibilities with limited but open-ended materials (e.g., ATAÇ) can support children's capacities for contentment, deepening, focus, patience, and creative problem-solving.

The fifth recommendation is to consider scalable micro-material approaches (such as the Six Bricks pedagogy) alongside access policies in contexts of inequality. To keep play pedagogy from becoming a privilege of high-resource environments, expand low-cost, replicable models. UNESCO–UNICEF's emphasis on access, quality, and

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equity in early childhood provides a key policy-level foundation for this strategy (UNESCO & UNICEF,2024).

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White Papers

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American Association for the Child's Right to Play

The Method, Strategies, and Principles of Play

Reading for Resilience: Using Children's Literature to Support Early Childhood Mental Health

Play is a Powerful Therapeutic Tool

Unlocking Potential: The Transformative Power of Loose Parts Play i n Early Childhood Education

This is Your Brain on Stories: Make-Believe Play, Fairy Tales and Resilience

Reframing Early Art Experiences: How Process Art Supports Real Learning

Part 1: Where Did All The Play Go? The Play Confusion: When Everything Is "Play," Nothing Is

Part 2: Where Did All The Play Go? The Play Confusion: When Everything Is "Play," Nothing Is

Explorers and Detectives: The Multimodality of Children's Literacy Development Through Play and the Role of the Educator

Children's Right to Play: Nurturing Social-Emotional Learning (SEL) Through Play in Early Childhood

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Reading for Resilience: Using Children's Literature to Support Early Childhood Mental Health

Marjorie Cole, MEd, President, IPA - Canada

Introduction

The early years of life are a time of rapid emotional, social, and brain development. During this period, children learn how to understand feelings, form relationships, and feel safe in the world. These early emotional experiences lay the foundation for mental health across the lifespan (Masten & Barnes, 2018). When young children feel supported and emotionally secure, they can learn, play, and connect with others more effectively. When they feel overwhelmed, frightened, or alone, their development can be disrupted in ways that last for years (Shulman, 2016).

Recent years have highlighted that young children are experiencing more stress than ever before. Family changes, economic pressure, illness, community stress, and the lingering effects of the COVID-19 pandemic have all increased emotional strain on children and caregivers (Mental Health Commission of Canada, 2023). Many young children are now showing signs of anxiety, grief, emotional dysregulation, and difficulty with relationships (Government of Canada, 2022).

However, many early childhood environments are not equipped to respond to these needs in developmentally appropriate ways. Mental health support is often limited, and young children cannot benefit from traditional therapy that relies on talking and insight (Masten & Barnes, 2018). Young children need something that fits their world of play, imagination, and stories.

Children's literature offers exactly that. Stories give children a way to explore emotions, challenges, and relationships through characters and imagination. When educators use books intentionally, they can help children feel seen, understood, and less alone. In play-based early learning settings, story time is already a daily routine. Shared reading should be recognized as a powerful mental health support for young children (Kumschick et al., 2014; Reach Out and Read, 2023).

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Problem Statement

There is a growing gap between the mental health needs of young children and the supports available to them, leaving many children without the guidance, resources, or safe spaces they need to develop healthy coping skills and emotional resilience. This gap places additional responsibility on early childhood educators, who often must support children's emotional wellbeing within everyday classroom routines, despite limited training and access to professional mental health services.

Many children today are dealing with anxiety, fear, sadness, grief, and being emotionally overwhelmed. Some have lost loved ones. Some have experienced family stress, illness, or instability. Others feel the effects of social isolation and disrupted routines (Mental Health Commission of Canada, 2023). Even when adults try to protect children, they absorb stress from their environments.

Young children often lack the words to explain how they feel. Instead, their distress shows up in behaviour. They may become aggressive, clingy, withdrawn, or overly emotional. These behaviours are often misunderstood as discipline problems rather than signs of emotional struggle (Shulman, 2016).

At the same time, mental health systems are not designed for young children. There are not enough child therapists, and long waitlists mean that many children never receive services. When they do, traditional talk-based approaches are poorly suited to children who are still developing language and self-awareness (Masten & Barnes, 2018).

Early childhood educators are on the front lines of this crisis. They care deeply about the children they serve, but many feel unprepared to address mental health needs. Most training programs focus on physical care, safety, and learning, with limited attention to emotional wellbeing (Mental Health Commission of Canada, 2023).

Early education also faces pressure to focus on academic skills, such as early literacy and numeracy. While these are important, children cannot learn effectively if they are emotionally overwhelmed or feel unsafe (Shulman, 2016).

These challenges create a system in which many young children struggle without enough support. There is a clear need for approaches that are developmentally

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appropriate, emotionally supportive, and easy to use in everyday early childhood settings.

Background

Research in Canada highlights the importance of early emotional development and mental health. The Mental Health Commission of Canada underscores that the first six years of life are critical for forming close relationships, managing emotions, and laying the foundation for later wellbeing (Mental Health Commission of Canada, 2023). At the same time, the Government of Canada has recognized gaps in supports for young children and has invested in research and programs to improve early childhood mental health outcomes (Government of Canada, 2022).

Globally, decades of research show that early emotional experiences shape brain development, stress response, and future mental health. When children feel supported, understood, and emotionally safe, they develop stronger coping skills and healthier relationships (Masten & Barnes, 2018).

Play is one of the primary ways young children process the world. Through play, children make sense of their experiences, act out worries, and practice problem-solving. Play allows children to explore difficult emotions in a way that feels safe and manageable (Shulman, 2016).

Stories are a form of guided play. When children listen to a story, they enter an imaginative world. They identify with characters, feel their emotions, and imagine how to solve problems. This makes stories a powerful tool for emotional learning (Kumschick et al., 2014).

Children's literature offers several mental health benefits:

- It helps children name and recognize emotions (Kumschick et al., 2014).
- It shows that other people have similar feelings and struggles (Masten & Barnes, 2018).
- It models coping skills, kindness, and resilience (Reach Out and Read, 2023).

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- It provides emotional distance that makes difficult topics feel safer (Bibliotherapy Systematic Review, 2025).

When an adult reads a story with warmth and attention, it also strengthens the child's sense of connection and safety. This relationship is one of the most important protective factors for mental health (Shulman, 2016).

Appropriate Approaches and Strategies

Children's books can support mental health in many simple, powerful ways when used thoughtfully. One important strategy is emotion-focused reading. Adults can pause during a story to notice how characters feel, using comments like "She looks sad" or "He seems worried" to help children connect feelings with words (Kumschick et al., 2014).

Story-Based Play**:** After reading, children can act out the story using puppets, dolls, or dramatic play. This lets children express emotions through movement and imagination, which is often easier than using words alone (Shulman, 2016).

Story Examples:

- *The Color Monster* (Llenas, 2012) helps children identify and name feelings.
- *When Sophie Gets Angry—Really, Really Angry* (Bang, 1999) demonstrates healthy coping strategies for anger.
- *The Invisible String* (Karst, 2000) supports children experiencing separation or loss.
- *I Am Peace: A Book of Mindfulness* (Verde, 2017) introduces mindfulness and calming strategies.
- *My Hero Is You* (IASC, 2020) addresses global stress, including the pandemic, and models coping and problem-solving.

Books can also help children facing specific challenges such as loss, fear, or separation. Seeing characters with similar experiences reduces isolation and supports emotional processing (Bibliotherapy Systematic Review, 2025).

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Re-reading is another powerful tool. Children often request the same story repeatedly when it resonates emotionally. Repetition helps build safety and mastery (Reach Out and Read, 2023). Creating calm reading spaces in classrooms or childcare centers supports emotional regulation. A cozy book corner can become a place where children go to feel calm and grounded (Reading Rockets, 2023).

Most importantly, adults should follow the child's lead. If a child wants to talk about a story, listen. If they want to play it out, support that. The goal is not to teach a lesson, but to create space for emotional expression (Shulman, 2016).

Conclusion and Recommendations

Children's mental health begins in the earliest years of life. When young children feel safe, understood, and emotionally supported, they can better learn, form relationships, and handle challenges (Masten & Barnes, 2018). Children's literature offers a simple, powerful way to support this emotional development (Kumschick et al., 2014).

Books help children make sense of their feelings, see that others struggle too, and imagine ways to cope. When reading is combined with play and caring relationships, it becomes a form of emotional care (Reach Out and Read, 2023).

Recommendations:

1. Early childhood programs should recognize shared reading as a mental health support, not just a literacy activity.
2. Educators should receive training on using books to support emotional development and regulation.
3. Childcare centres and other early learning environments should build diverse collections of books that include stories about feelings, loss, change, and resilience.
4. Encourage story-based play as part of daily routines.
5. Policies and funding should support mental-health-informed literacy programs in early childhood settings.

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By placing stories at the heart of emotional support, we can help young children grow into more resilient, confident, and connected individuals.

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Play is a Powerful Therapeutic Tool

Mina Dilip, MSc, Play Therapist

Introduction

People tend to dismiss play as mere leisure. Some cultures view play as a waste of time. However, emerging trends in psychology and neuroscience demonstrate its profound role in healing and recovery. This white paper explores the healing power of play as a therapeutic tool, highlighting its impact on trauma recovery, nervous system regulation, emotional healing, resilience-building, and the development of social skills. Drawing on a case-study-based foundation of field evidence and cross-cultural perspectives, this white paper aims to provide practical recommendations for practitioners, institutions, and policymakers. By framing play as an essential component of health care, this paper calls for systemic recognition and investment in play therapy as a critical intervention for children, adolescents, and adults.

Problem Statement

In spite of growing evidence, play therapy remains underutilized and undervalued in mainstream healthcare services. The chief barriers are:

- **Perception issues:** Play is often perceived as “frivolous” rather than therapeutic.
- **Resource constraints:** Limited availability of trained play therapists, especially in low-resource settings, owing to the high cost of training and inadequate accessibility in developing countries.
- **Policy Gaps:** Lack of formal recognition as an effective therapeutic tool in most national health and education systems.
- **Overall scepticism:** Families and institutions tend to favour cognitive, solution-oriented methods over non-directive, play-based approaches.

These gaps hinder people—particularly trauma survivors—from accessing an effective intervention that has the potential to support recovery and well-being.

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Background

When Words Are Not Enough

Some moments in life are too heavy for words. A child who has witnessed violence, an adult carrying decades of unspoken grief, or a parent overwhelmed by the chaos of family life may all find themselves without the language needed to communicate their pain. Play steps in at this moment—not as an escape, but as a bridge. Neuroscience explains this through polyvagal theory, which suggests that when we enter a **dorsal vagal** state of complete shutdown, the vagus nerve becomes compressed, making it hard to process language. According to the polyvagal theory propounded by Stephen Porges (2024), the human nervous system switches between three distinct states: the **ventral vagal** state of safety and social engagement; the sympathetic activation state, which triggers the fight-or-flight response; and the **dorsal vagal** state of complete shutdown and withdrawal.

Approaches / Strategies

This white paper synthesizes:

- **Available Literature:** Peer-reviewed studies in psychology, neuroscience, and education.
- **Case Vignettes:** Real-world examples from therapeutic practice demonstrating the healing power of play.
- **Why Play Heals**: Science-backed reasons to support the power of play as a therapeutic tool.
- **Cross-Cultural Insights:** Exploration of how play is already being used in different cultures for healing and resilience.
- **Comparative Frameworks:** Examining play therapy alongside traditional talk therapies to illustrate its unique benefits.

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Key Findings based on Available Literature

1. Neurological and Psychological Benefits of Play

- **Play activates brain pathways that reduce stress and promote healing**. Siviy (2016) in "A Brain Motivated to Play: Insights into the Neurobiology of Play", describes the coordination of brain parts such as the frontal cortex (the thinking part of the brain), the striatum (the central hub of the brain that processes motor function and rewards), and the amygdala (the brain's emotion centre) during play, and the neurochemical systems (such as dopamine and opioids) that bestow rewarding or anti-stress properties upon the human body.
- **Symbolic play allows children to process trauma non-verbally, fostering emotional regulation**. In "The Power of Symbolic Play in Emotional Development", Wieder (2017) offers a conceptual review of how symbolic play helps externalize internal states and enables emotional regulation without language.
- **Adults rediscover creativity and self-expression, reducing symptoms of burnout and depression**. A targeted study by Shen et al. (2020) titled "The playful mediator, moderator, or outcome? How playfulness contributes to adult mental health" offers empirical evidence that playfulness in adults improves well-being, reduces stress, and prevents burnout.

2. Social and Developmental Benefits

- **Group play interventions build empathy, cooperation, and resilience**. This was definitively proven by an extensive study conducted in Iran by Chinekesh et al (2014) titled "Effect of play therapy on social-emotional skills in pre-school children."
- **In families, play strengthens bonds and improves communication**. Studies conducted by various researchers, including Chu, McLean, and Edwards (2023) and Røe-Indregård et al. (2022), found that parental involvement and co-play increased shared engagement, reduced maternal stress, enriched parent-child relationships, and enhanced communication among family members.

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- **In hospitals, play reduces anxiety and boosts adjustment to stressful events**. In Karnataka, India, a nurse-led quasi-experimental play intervention (Benazeera & Reshma, 2025) using board games and picture books among children aged 7 to 12 years revealed significant reductions in state anxiety, trait anxiety, and medical fear over several days in the intervention group compared to the control group.

Case Vignettes

Here are some case studies that demonstrate how the nervous system regulates itself back to the ventral vagal state within the safe context of play (Porges, 2024).

Case 1: The Traumatised child

A seven-year-old boy sat silently in therapy sessions, unable to talk about the nights he spent hiding under his bed while his parents fought violently. The moment he picked up a toy soldier, placed it in front of the dollhouse, and whispered, “You’re safe now,” his inner world began to emerge. What he couldn't say aloud, he could show through play. This is the essence of healing through play therapy: when used therapeutically, play allows the unspoken to be expressed, the unseen to be witnessed, and the unbearable to be transformed.

Case 2: The Betrayed Wife

A traumatised woman entered expressive play therapy, weighed down by silence. Her husband had betrayed her by having multiple extramarital affairs. She had gone completely mute, unable to utter a single word. She was invited to make a mask—choosing colours, shapes, and symbols of her choice. The mask she created was dark and sharp, reflecting the grief and anger she had hidden away. Behind the mask, she finally allowed herself to cry and rage. By externalizing her trauma through creative play, she began to accept and integrate her emotions. In time, she was able to face the big decision she needed to make about leaving the marriage. The mask became a turning point in her healing journey.

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Case 3: Group Play Therapy for High School Teachers

In a high school teachers' workshop, a group of exhausted teachers were asked to play simple team-building games. At first, the teachers resisted, embarrassed by the childishness of the games. However, within minutes, laughter filled the room. They discovered each other beyond roles and titles—simply as people.

One teacher shared, "I realized I hadn't laughed like that in years. It reminded me why I chose to work with children in the first place." The session didn't just boost morale; it reignited connection, collaboration, and resilience.

Case 4: Circle of Safety

In a group of teenagers who had lost close family members to cancer, a simple game of tossing and catching a ball in a circle created powerful moments of safety and connection. Boys who once avoided eye contact began to giggle as they waited for their turn. Each catch and throw was a small act of trust.

Through play, the group slowly built a sense of belonging. What began as a game became a rehearsal for the real world—a reminder that joy and safety can exist even after hardship.

Why Play Heals: Insights from Science and Practice

While the above stories are compelling, they are also grounded in science. Here is how:

- **Emotional Safety**: Play lowers defences. It allows people to engage without the pressure of direct confrontation (Axline, 1947; Landreth, 2012).
- **Neurobiology of Play**: Neuroscientist Jaak Panksepp identified play as a primary emotional system in the brain. Play reduces stress hormones and increases endorphins, such as oxytocin and dopamine, in the body (Panksepp,2007; Russell, 2008).
- **Symbolic Processing**: Play lets people externalize difficult experiences symbolically. Children can make a toy figure fight on their behalf, or adults can use art to express grief they cannot give voice to (Weider, 2017).

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- **Resilience Building**: Through playful problem-solving, individuals rehearse coping strategies that strengthen them in real life, especially when play is used in group settings (Eberle, 2014).
- **Play in the Nervous System**: Drawing upon the polyvagal theory mentioned above, play is the easiest and quickest way to convey safety to the nervous system, thereby moving away from sympathetic activation or dorsal shutdown into the secure, tranquil ventral vagal state (Porges, 2024).
- **Cross-cultural Applications of Play:** Many cultures already use play in varied settings as a medium of community building, healing, and recovery. Below are some examples:
    - **Generic Contexts**

      Many African tribes use rhythmic musical and body play through drumming and dancing rituals to bring communities together (Victor & Muller, 2018; Bunt & Stige, 2014).

      In India, folk games and storytelling serve as natural mediums of therapeutic play, especially in rural settings (Ramanujam, 2021; International Traditional Sports and Games Council (ICTSG), 2025).

      Western models, such as the Montessori method of schooling, use structured playrooms with varied toys as learning materials (Montessori, 1912; Lillard, 2017).

    - **Crisis and Trauma Contexts**

      Across cultures, refugee children engaged in play interventions show fewer Post-Traumatic Stress Disorder (PTSD) symptoms and stronger resilience (Ty & Green, 2020; Pfeiffer & Sachser, 2022).

      Hospital play therapy reduces pre-operative anxiety and accelerates recovery (Benazeera & Aranha, 2025; Li et al., 2016).

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Play Vs. Traditional Talk Therapies: A Comparison

Traditional talk therapy relies on verbal articulation of thoughts and emotions. In contrast, play therapy uses symbolic, sensory, and creative expression, offering ways to channelise and release experiences beyond words—especially valuable for children or trauma survivors (Axline, 1947; Landreth, 2012).

Research has shown that trauma sits in the body, and not in some abstract place called 'the mind'. When an individual is required to talk about traumatic experiences using words, the pain, which was hitherto missing from the cerebral cortex of the brain, enters that part of the body, too, potentially re-traumatising the person.

On the other hand, play therapy uses neck-down processing, because it is mostly non-verbal, body-based, non-directive and non-threatening. Play helps access deeply embedded trauma and project it outward through externalization onto toys, puppets, dolls, or drawings. Once externalized, the multi-sensory nature of play helps make sense of these difficult experiences, integrate them effectively, and move toward recovery, thereby minimizing the chances of re-traumatization (van der Kolk, 2014; Levine, 2014).

Challenges Identified

Returning to the original premise of this white paper about the under-utilisation of play therapy as an intervention for mental wellbeing, here are the top challenges identified as the reasons for the same:

- Misconceptions that play is "non-serious" (Lynch & Moore, 2016).
- Difficulty scaling play therapy interventions across institutional contexts (Ebrahim, Steen, & Paradise, 2012).
- Lack of standardized training and certification pathways in many regions (Ray et al., 2005).
- Limited resources for marginalized or crisis-affected populations (Kazdin, 1997).

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Recommendations

This section sets out recommendations for mental health practitioners, institutions such as schools, hospitals, and NGOs, and policymakers.

For Practitioners

- Pursue specialized training in play therapy and expressive arts (Association for Play Therapy, 2023).
- Use culturally sensitive play materials and methods.
- Integrate play into existing therapeutic practices to increase engagement (Gil & Drewes, Eds, 2006; Ray, 2011; United Nations Committee on the Rights of the Child, 2013).

For Institutions (Schools, Hospitals, NGOs)

- Establish dedicated playrooms and provide access to therapeutic materials.
- Train staff in basic play-based interventions.
- Partner with certified play therapists to support children and families (Ray, 2011; Gaynard et al., 1990)

For Policymakers

- Recognize play therapy as a valid and reimbursable clinical intervention.
- Include play therapy training in university counseling and psychology programs.
- Start funding research to evaluate the long-term outcomes of play-based interventions.
- Ensure that child-protection and trauma-care centres offer integrated play-therapy services (World Health Organization, 2019; United Nations Committee on the Rights of the Child, 2013). *General Comment No. 17 2013).*

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The Forgotten Language of Play

Play is the first language we learn as children. Long before we master words, we explore the world through touch, movement, and imagination. Babies giggle in peekaboo, toddlers create entire worlds using building blocks, and children spin make-believe stories using dolls. As we grow, society teaches us to take ourselves seriously. Productivity, achievement, and responsibility are prioritised, and play is dismissed as "child's stuff." In doing so, we lose access to a powerful tool for healing. For children, play is a direct expression of their inner world. For adults, returning to play is like rediscovering a forgotten dialect of the soul—one that reconnects us to spontaneity, creativity, and emotional freedom.

Conclusion

Healing does not always come through heavy conversations or analytical insight. Sometimes, it comes through laughter, imagination, and the simple act of play. Play is a quiet revolution. It does not demand; it invites. It does not pressure; it opens. It does not lecture; it allows. For children, adults, families, and communities, play is not a luxury—it is a lifeline.

Reclaiming play is not about escaping reality; it is about transforming it. It is about finding safety in chaos, joy in despair, and connection in isolation. In a world that demands seriousness, choosing to play may be the most radical act of healing we can do.

The call to action is urgent: invest in play therapy, train practitioners, adapt culturally, and advocate for systemic recognition. By honouring the healing power of play, we honour the most natural pathway to recovery and well-being.

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Unlocking Potential: The Transformative Power of Loose Parts Play in Early Childhood Education

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Introduction

This white paper explores the benefits of loose parts play in early childhood education. It addresses the problem of limited opportunities for children to develop crucial cognitive, social-emotional, and physical skills through open-ended play-based experiences. Drawing on research and practical applications, it proposes implementing loose parts play to foster creativity, problem-solving, and overall development in young learners, supporting their right to play (Gibson et al., 2017). Despite decades of research supporting the benefits of open-ended play, opportunities for loose parts experiences remain limited in many early childhood settings. Yet in practice, these opportunities are implemented unevenly, with many programs still relying heavily on structured, adult-led activities.

Problem Statement

Many early childhood education programs lack opportunities for children to engage in open-ended, exploratory play that supports holistic development (Cutuli et al., 2023; Donison & Halsall, 2023; Levickis et al., 2022). Traditional structured activities may limit a child's creativity, problem-solving abilities, and independent thinking. Sadly, this is not a new problem, as previous researchers have noted increased structure during playtime, even among very young children (Houser et al., 2016). Over the past several decades, early childhood pedagogy in many programs has shifted toward more academic, teacher-directed activities, often reducing opportunities for unstructured play that once formed the cornerstone of early learning (Barblett et al., 2016; Hesterman & Targowska, 2019; Kilderry, 2015).

Unlike teacher-directed, structured play, loose parts play offers children opportunities to:

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1. learn in research-based provocations that support early brain development,
2. engage in open-ended play experiences that help them establish independence, build autonomy, make choices, and assert their feelings and opinions, and
3. demonstrate knowledge and skills in developmentally appropriate ways, using all five senses, as they interact with the world in safe play spaces.

The proposed solution is to implement open-ended loose parts play in early childhood settings to enhance children's development across all domains and support all children's right to play.

Background: Designing Loose Parts Play Environments

Nicholson's Theory of Loose Parts (2023) emphasizes that those who design environments for children should do so intentionally, creating spaces that foster learning how to learn and think creatively. The theory highlights the environment's role as a "third teacher" and is grounded in the belief that children are capable, inquisitive, and creative. Loose parts—materials that can be moved, carried, redesigned, lined up, taken apart, and reassembled in countless ways—can be used alone or combined with other materials to support open-ended exploration (Penn State Extension, n.d.). The possibilities for child-led loose parts play are limitless. As Nicholson (1971) explained, "In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it" (p. 30). Similarly, Gowrie New South Wales notes, "You create the learning environment, and then they take over. Children love to be independent. They are natural learners and playing with loose parts taps into this to help them learn in an open-ended way" (n.d., 13). Building on these theoretical foundations, educators can apply loose parts principles to create rich, child-centered play environments.

Educators should create play spaces with a variety of loose parts and little to no instruction so children can engage with objects independently and cooperatively in ways they choose (Spencer et al., 2019). According to Daly and Beloglovsky, "engagement is how children integrate and apply their social, emotional, physical, and cognitive capacities as they interact with the environment in both developmentally and contextually appropriate ways" (2020, p. 113). In addition to variety and accessibility,

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cultural relevance is essential. When possible, choose materials that reflect the children's cultural backgrounds and identities. Reflecting children's culture and identities through loose parts helps them build curiosity, construct knowledge, and feel validated as themselves and as peers. Culturally relevant loose parts can be used to promote a sense of community, celebrate diversity, and help children develop self-esteem (Branje et al., 2021; Caldwell et al., 2023; Rodrigues et al., 2023; Spencer et al., 2021).

Benefits of Loose Parts Play and Implications for Child Development

When children engage in developmentally appropriate, open-ended loose parts play, they discover more about themselves and the world around them. They explore textures, use their senses to collect and analyze information, solve problems, and design creative solutions. These sensory-rich experiences strengthen attention span, persistence, and intrinsic motivation—qualities that drive further exploration and help children integrate new knowledge. The following sections describe how child-centered loose parts play supports growth in four key domains: approaches to learning, cognitive, physical, and social-emotional development.

Approaches to Learning

Approaches to learning encompass both how children learn and their attitudes toward learning. According to the Illinois Early Learning Project (n.d., para.1), "Children are born ready to learn, and the first three years are the time when children develop the habits in how they approach and explore their world." These habits include initiative, curiosity, sustained attention, persistence, reasoning, creative thinking, confidence, risk-taking, and imagination.

Through loose parts play, young children naturally practice these skills. They take risks, test new ideas, ask questions, and persevere through challenges—sometimes encountering failure and learning from it. They experiment with different approaches, seek help when needed, and build the confidence to try again. Each of these experiences contributes to a mindset that values problem-solving, creativity, and resilience.

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Implications for Promoting Approaches to Learning with Loose Parts.

Educators can nurture these dispositions by resisting the urge to step in too soon when children encounter difficulties. Instead, they can observe closely and offer guidance only when frustration is likely to end the play. This balance between independence and support helps children develop resilience and a growth mindset. Educators can also:

- Encourage cognitive flexibility by prompting children to see new possibilities in familiar materials.
- Spark curiosity by asking open-ended questions during play.
- Invite children to describe their play processes and explain their decisions, reinforcing language and reasoning skills.
- Support healthy risk-taking by framing failed attempts as learning opportunities.
- Notice which materials spark sustained engagement and incorporate them into future play opportunities.
- Provide a "work-in-progress" space so children can pause and return to their projects, fostering persistence and continuity in learning.

Cognitive Development

Both scholars and educators espouse loose parts play as a vehicle for promoting cognitive development, and, more specifically, creative and divergent thinking and problem-solving. Loose parts play "is unique among play types because children can combine different play types and natural or manufactured materials in one occurrence" (Cankaya et al., 2023, p. 1). The open-ended nature of loose parts play invites children to take initiative and experiment without apprehension. Loose parts play allows children to explore, investigate, and make sense of their world. They develop higher-order creative-thinking skills by actively constructing their knowledge through playful experiences. As children manipulate and repurpose materials, they strengthen both cognitive flexibility and self-regulation (Cankaya et al., 2023). This type of play lays a

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strong foundation for lifelong learning and intellectual growth (Naish et al., 2023). Educators can intentionally support these benefits through thoughtful practices.

Implications for Promoting Cognitive Development with Loose Parts.

According to Cankaya, Martin, & Haugen (2025), a loose parts plan can support many areas of young children's thinking and learning. See below for steps educators can take to facilitate cognitive development through loose parts play:

- Promote problem-solving by encouraging children to plan, make choices, and solve problems through trial and error.
- Support critical thinking by encouraging children to find new uses for familiar materials.
- Support children's imaginative thinking and language development through loose parts pretend play.
- Encourage children to explore and describe materials using multiple senses.
- Promote language and reasoning by encouraging children to share their ideas and explain their thinking as they work.

Physical Development

As children explore, investigate, and make sense of the world through loose parts play, they have many opportunities to enhance fine and gross motor skills (Gibson et al., 2017). In fact, previous research on loose parts play has shown significant benefits for children's physical development (Houser et al., 2016; Gibson et al., 2017). Quantitative studies have shown that loose parts play interventions lead to significant increases in step counts and minutes spent in moderate-to-vigorous physical activity (MVPA), as well as decreases in sedentary behavior (Houser et al., 2016; Gibson et al., 2017; Spencer et al., 2021). Whether indoors or outdoors, and especially during riskier forms of play, experiences with loose parts encourage movement, exploration, and energy expenditure—leading to higher physical activity levels and less sedentary time (Houser et al., 2016; Spencer et al., 2021). This type of play also supports movement development, which is an important aspect of physical literacy (Houser et al., 2016).

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Educators have observed that engaging with loose parts allows children to challenge themselves physically and develop fundamental movement skills such as coordination, balance, muscular strength, and endurance (Spencer et al., 2021). Loose parts diversify the play experience, providing ample opportunities for activities like climbing, swinging, and balancing, thereby enabling risk-taking (Houser et al., 2016; Spencer et al., 2021). The concept of "object affordance" highlights how loose parts, whether natural or synthetic, offer diverse opportunities for physical action, tailored to each child's interpretation and interaction with them (Houser et al., 2016). Object affordance, a concept first introduced by Gibson (1979) in his ecological theory of perception, describes how an object's properties suggest possible actions, allowing each child to interpret and interact with loose parts in unique and developmentally meaningful ways.

Implications for Promoting Physical Development with Loose Parts.

Loose parts play naturally supports fine and gross motor skill development as children move, manipulate materials, and navigate space. Listed below are some specific strategies educators can employ:

- Design opportunities for children to develop fine motor skills (e.g., muscular strength, dexterity, and eye-hand coordination) through grasping, sorting, pouring, stacking, tying, twisting, threading, and arranging materials such as buttons, sticks, stones, blocks, thread, and fabric pieces.
- Offer large loose parts (e.g., tires, planks) in outdoor spaces to encourage children to climb, balance, jump, and build.
- Give children opportunities to carry and stack large and small materials.
- Help children develop gross motor skills and spatial awareness with loose-parts obstacle courses.

Social-Emotional Development

Loose parts play offers rich opportunities for developing young children's social and emotional skills. Studies link loose parts play to greater happiness at school, more complex dramatic play, and enhanced creativity (Gibson et al., 2017). When children

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guide their own play, they make choices, assert opinions, and explore feelings—building autonomy, independence, and self-confidence.

Loose parts can also act as companions in imaginative play, helping children process emotions and work through challenges (Wilson, 2020). Through unstructured play, children navigate social worlds, make decisions, and experience the natural consequences of their actions—developing self-regulation in the process (Gibson et al., 2017).

Collaborative play with loose parts strengthens cooperation, problem-solving, peer negotiation, and self-expression (Cankaya et al., 2023; Drew et al., 2008; Maxwell et al., 2017). As children work together to design and build, they practice listening, sharing, and resolving conflicts (Daly & Beloglovsky, 2015), fostering a sense of community (Curtis & Carter, 2014).

Empathy also grows during loose parts play. Storytelling and dramatic play encourage children to see situations from another's perspective, anticipate others' emotions, and respond with understanding (Ginsburg, 2007).

Just as empathy deepens children's interpersonal skills, cultural competence broadens their understanding of diverse perspectives. When educators provide loose parts that reflect children's cultural backgrounds, they create an inclusive environment where all children feel seen, valued, and connected (Vecchi, 2010).

Implications for Promoting Social-Emotional Development with Loose Parts.

A key component of early childhood education is facilitating children's social-emotional development, which shapes their capacity to build relationships, regulate their emotions, and interact positively with others (Collaborative for Academic, Social, and Emotional Learning, 2020). Encouraging play with loose parts—open-ended materials such as stones, twigs, cloth, and discarded objects that children can use in many inventive ways—is an often-cited way to build these skills (Nicholson, 1971). The principles of loose parts play highlight the value of play settings rich in variation that encourage experimentation, creativity, and teamwork. When children play

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collaboratively with loose parts, they practice important social-emotional skills such as cooperation, decision-making, problem-solving, self-expression, and peer negotiation (Cankaya et al., 2023; Drew et al., 2008; Maxwell et al., 2017). While collaborating to build, exchange, and co-create with loose parts, children also practice listening, sharing, and conflict-resolution skills (Daly & Beloglovsky, 2015). Open-ended loose parts play exploration also allows children to begin, guide, and modify their play using loose parts components, which promotes a sense of control and independence. This liberty fosters social skills such as self-assurance, autonomy, and a sense of proficiency as they make decisions and consider the consequences in an unstructured setting (Curtis & Carter, 2014). As children's social skills strengthen, their playful interactions foster a sense of community.

Children who create their play narratives in open-ended play spaces are more likely to develop empathy, communication skills, and emotional resilience (Cankaya et al., 2023; Koralek et al., 2013). The unrestricted nature of loose parts encourages emotional expression by allowing children to represent emotions through building and creative scenarios. Children may act out painful emotions or personal experiences to understand and control them (Nicholson, 1971). These play experiences allow them to work through difficult emotions in a creative, safe environment.

Children can also engage in role-playing and dramatic play with loose parts, which helps them understand other people's viewpoints. These experiences foster empathy, an important social-emotional ability (Ginsburg, 2007). For example, incorporating symbolic objects and figurines into a storyline through loose parts play may encourage children to consider a character's emotions or responses to challenges. Finally, loose parts play gives teachers opportunities to help young children build cultural competence, the ability to learn and work effectively with people from other cultures. When teachers provide loose parts that represent the cultural backgrounds of the children in the classroom, children feel a sense of belonging and importance. When they see themselves represented, they feel like they matter. This inclusive environment validates children's experiences and enhances their self-esteem (Vecchi, 2010). Listed below are some implications for promoting social-emotional development with loose parts.

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- Encourage children to use social skills such as listening, sharing, negotiating, and resolving conflicts as they co-construct with peers.
- Guide children toward shared goals through cooperative building projects.
- Give children opportunities to process emotions by incorporating them into loose parts play scenarios.
- Invite children to act out familiar stories with loose parts, explore characters' perspectives, and create alternate endings.
- Allow children to direct their own loose parts play, making decisions and adapting plans based on interest and motivation.
- Offer loose parts that represent the cultural diversity of the classroom community.

When intentionally facilitated, loose parts play is more than open-ended exploration—it becomes a vehicle for building emotional resilience, social competence, and inclusive, respectful communities.

Conclusion/Recommendations

Loose parts play is a powerful approach to early childhood education, offering measurable benefits in approaches to learning, cognitive growth, social-emotional well-being, and physical development. Young children are naturally curious, driven to explore, and eager to test ideas. When given open-ended materials, they investigate cause and effect, experiment with spatial relationships, and innovate through hands-on experiences. These opportunities allow children to build independence, develop resilience, and demonstrate their knowledge in ways that are developmentally appropriate and personally meaningful.

In an educational climate that increasingly prioritizes standardized outcomes, loose parts play is a vital reminder of the value of process over product. It affirms the importance of unstructured, child-led exploration as a core component of learning, not an optional extra. By providing children with environments rich in diverse, open-ended materials, educators can support agency, creativity, and lifelong learning skills while honoring children's right to play.

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Recommendations for Implementation

- Offer developmentally appropriate materials and open-ended activities that allow time for sustained discovery throughout the daily schedule.
- Provide a wide range of discovered, recycled, and natural materials with varied textures, sizes, and shapes to stimulate creativity and sensory exploration.
- Design indoor and outdoor loose parts play spaces with accessible storage to foster independence and autonomy.
- Invest in professional development focused on engaging, intentional ways to integrate loose parts play into curriculum and routines.
- Partner with families by requesting safe, appropriate materials and sharing strategies for using loose parts at home.
- Document learning through observations, photographs, and examples of children's work to communicate the value of loose parts play to families, administrators, and policymakers.

When implemented thoughtfully, loose parts play benefits every child and strengthens the quality of early learning programs. It is both an educational strategy and a statement of belief that children deserve the freedom, time, and materials to explore, create, and grow. By embracing loose parts play, educators, families, and policymakers commit to fostering environments where every child can explore, create, and grow — and to shaping an educational culture that values curiosity, agency, and the right to play.

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This is Your Brain on Stories: Make-Believe Play, Fairy Tales and Resilience

Stephanie Goloway, EdD

Introduction

Make-believe play. Pretend play. Dramatic play. Fantasy play. Sociodramatic play. Symbolic play. Narrative play. No matter how we label the ephemeral creation of stories in children's imaginations, two things remain constant: its omnipresence in childhood and its critical importance to healthy development across all domains. Yet, like play in general, and make-believe's cheeky cousin, risky play, in particular, this powerful weaving of symbols, social interaction and whimsy is in decline, at least in adult-monitored settings.

The same can be said for another bastion of make-believe: fairy tales, once the foundation of every child's literary exploration. Modern parents and teachers often eschew folk and fairy tales from around the world. They are seen as too dark, too scary, too violent, too sexist: inappropriate for the tender sensibilities of children.

In this paper, I will be examining some of the neuroscience behind the developmental significance of fairy tales and storytelling, and how this relates to make-believe play. Implications for resilience will be suggested. I offer strategies for encouraging rich, imaginative play in all settings. Finally, there is a plea for committed advocacy to protect the joyful, messy quicksilver of make-believe as we nurture children so they can successfully ride the inevitable waves of change in their worlds.

Problem Statement

Research shows that all play is in decline, and many of the reasons overlap with declines in both the quantity and quality of mature make-believe play (e.g., Leong & Bodrova, 2012; Nicolopoulu & Ilgaz, 2010). The increased focus on early academics leaves less time for child-led play. Screens not only consume time and attention but also affect a child's ability to construct mental imagery and develop social skills. Safety concerns, too, play a role. While "safety" may seem more of an issue with risky play, adult focus on children's *emotional* safety may limit the emergence of more complex play scenarios, as well as children's fascination with the darker themes of fairy tales.

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However, the more concerned adults are about protecting children from life's obstacles, the less we support the development of their adaptive capacity for resilience. Resilience is defined as our ability to overcome challenges and adversity and is a core component of mental health (National Scientific Council on the Developing Child, 2015). Coincidentally (or not!), the experiences that support the development of resilience (relationships, agency, executive functions, self-regulation, and cultural affirmation) (Masten, 2015) are embedded in both make-believe play and fairy tales (Bodrova & Leong, 2024; Goloway, 2017; 2022).

A century of theory and research that highlights the importance of make-believe play has not stopped this decline. Would evidence from neuroscience help adults to reassess their priorities and return their focus to the critical importance of representational development in the form of pretend play?

Children actively engaged in pretend play are not easy subjects for neuroscience research. Brain research on storytelling can offer insights into how the brain responds to narrative fantasy play. These findings may help shift the perspective of those who do not value make-believe, fairy tales, and related play.

Background

"Pretend you're a frog, and you jump into a bad guy, but you don't know it."

"Grab 'em!"

"He's stealing kitty!"

"Get him, over there, get him!"

"Blast him, grind him up, he got the gold!"

"Meow, meow, meow."

"Here's your kitty, Snow White."

"Are you the dwarfs? The frog dwarfs?"

"We're the ninja dwarfs. The frog is a ninja. Watch out! We might have to blow this place up again." (Paley, 2004, p. 30).

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As this play episode, recorded by early educator and play scholar Vivian Gussin Paley, illustrates, children's make-believe is about many things, from mommies and babies, to kitty cats and frogs, to ninjas, dwarfs, and princesses. However, it is also almost always about **trouble**. Whether in the child-initiated scenarios they play out, or the stories they tell, or the fantasy tales they gravitate towards, children are fascinated by risk, danger, and thorny challenges (Kuschner, 2019).

It would be convenient to blame this on the media, video games, and 21st-century issues. However, the same themes of good guys vs. bad guys, facing monsters both imagined and real, and triumphing over adversity were documented by Brian Sutton-Smith and colleagues in their seminal study of children's storytelling in the 1970s (Sutton-Smith, 1981). So what is it that makes trouble so attractive to the child's imagination?

Play has been described as preparation for life (e.g., Gray, 2013; Sutton-Smith, 2017). Because the only thing constant in life is change, play's purpose, from an evolutionary perspective, is to provide practice in adapting to change and uncertainty as we develop our skills. All kinds of play support the development of this resilience to change (Goloway, 2024). Much has been written, especially, about the decline in risky play and the resulting impact on children's mental health and ability to handle stress and adversity. (e.g., Gray et al., 2023).

Researchers have studied (and debated) the role of make-believe play in many domains of child development and learning for generations (e.g., Fein, 1981; Lillard et al., 2013; Doebel & Lillard, 2023). Researchers have studied many areas, including social and emotional skills; representational (symbolic) development, including language, literacy, and storytelling; executive functions; and self-regulation. Researchers have also analyzed specific aspects of play directly connected to stories, ranging from play schemes and episodes (Welsch, 2008) to story-structure cohesion and emotional immersion during fairy-tale role plays (El'koninova, 2001).

But WHY do children participating in this universal and developmentally predictable form of play embrace so much angst and trouble? Why do the stories they co-create delve into conflict, fear, and danger? The answer may lie in children's ability to

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make (themselves and others) **believe** that the (sometimes scary) world is a place they can control by creating stories where this is true. If play prepares one to overcome the unknown in life, it makes sense that children's make-believe play would embrace the unknown - trouble in symbolic form - to master it. (Huber, 2024)

One challenge in empirically studying this aspect of children's make-believe is the quicksilver speed with which their stories can emerge, transform, and dissipate, as in the example above. Child logic is not the same as adult logic! More importantly, even the most attuned observer with the most sophisticated recording techniques cannot truly know what is going on beneath the sparkly crowns and firefighters' helmets. Do such play scenarios involving monsters, quicksand, and babies lost in the woods actually activate the developing brain's capacity for resilience?

It is hard to imagine young children playing with electrodes taped to their heads. However, neuroscientists have studied children and adults as they read, hear, or view fantasy stories, such as fairy tales, which contain similar elements of danger. The results give us insight into how the brain responds to imagined challenges.

In a nutshell: our "brains on stories" respond to such challenges AS IF they were real (Smith, 2016). The same stress hormones are released (i.e., cortisol) when the dragon in the story bursts onto the scene, as would be released, for example, if you saw a car rapidly heading your way. The heightened attention to the plot facilitates connection with the characters, leading to the release of oxytocin, sometimes called the "caring hormone." When the story arc reveals the successful resolution of the danger (e.g., the dragon is defeated), the limbic brain responds to the happily-ever-after ending in the same way it would in real life: with the release of dopamine (Smith, 2016; Zak, 2014)

Researchers such as Paul Zak call this process "transportation" and have linked it to feelings of empathy elicited by stories with this kind of narrative arc (Zak, 2015). It appears to be a neuroscience component to what Vygotsky called "doubleness" (Vygotsky, 1978). "Doubleness" is a child's ability to simultaneously feel happy because she is playing, but scared, in the context of that play, of the dragon about to breathe fire into her castle. This gives the child the opportunity to regulate both emotions, since both must be held in check for the story to move forward. Fleer and Hammer (2013) note that

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fairytales provide an ideal source of such *doubleness* because children feel comfortable with the stories' familiar structure and relationships, while still experiencing the tingle of fear or suspense that the villain or daunting quest provides.

Compelling evidence suggests that hearing stories about overcoming obstacles positively affects our brain's ability to navigate stress and show empathy and compassion. Like other neural pathways, these are strengthened through repetition. Regular exposure to such stories, whether read or created in play, could develop and strengthen the "resilience muscle" of the brain.

However, the kind of stories studied, i.e., folk and fairy tales and their modern relatives, fantasy, are discouraged in many settings. Popular media (e.g., McFadden, 2025; Guardian, 2024) is rife with anti-fairy-tale sentiment, and parents who want only the best for their children may avoid reading these ancient tales.

Of greater concern, a widely-used classroom assessment tool, ECERS-3 (Early Childhood Environment Rate Scale-Third Edition) specifically identifies as "inappropriate" stories that may frighten children: "This would be true in many fairy tales, for example, where the good character kills the "bad" character, instead of working out problems without harming one another" (Harms, Clifford & Cryer, 2015, p. 40). While fairy tales are not specifically forbidden, classrooms subject to quality rating evaluations often remove classic folktales such as *The Three Billy Goats Gruff*, *The Three Little Pigs*, *Little Red Riding Hood*, and *Jack and the Beanstalk* to meet the ECERS criterion.

This may have a cyclical effect. Children weave themes and images from the stories they hear, read, or view into their make-believe (e.g., Welsch, 2008). When their literary diet consists solely of stories that check off adult boxes for civility, safety, and realism, they may be less likely to create and act out the gritty tales of trouble and challenge their brains need to thrive. As play advocates, we have a responsibility to ensure that children's developing brains flourish in the magical forest where neuroscience, make-believe, story, and resilience dance.

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Approaches and Strategies

The specific approaches and strategies below encourage the development of mature make-believe play. They are divided into three categories: Time, Space, and Stories. Each has a strong theoretical and research base.

Time

One major obstacle to developing make-believe play is the lack of time many programs devote to it. Bodrova and Leong (2024) suggest that in the later preschool years, at least 40-60 minutes of uninterrupted time is necessary for mature play scenarios to develop; these rich make-believe stories can extend over several days. *The Play Environment Rating Scale: ECERS Extension, Play Environment Rating Scale* (PERS) (Shiyan et al., 2025) requires at least an hour for a "Good" rating, and more for "Excellent." Without enough time to identify characters, imagine props and plots, and co-create interesting scenarios, children's play remains stunted. The rich symbolic thinking and self-regulation that emerge in make-believe cannot fit into a fifteen-minute rotation of classroom centers.

Honoring make-believe also means recognizing that for most young children, it is a state of being, rather than a block of time. They imagine and act out stories on the playground, at the lunch table, and even during bathroom breaks. Building some flexibility into the structure of a day to allow for and thoughtfully observe these critical "dalliances" into the imagination supports children's development across all domains.

Space

In addition to extended, flexible time to facilitate pretend play, an environment that supports make-believe includes flexible spaces and a variety of open-ended materials. PERS (2025) recommends that both indoor and outdoor spaces include many opportunities to transform the physical environment to accommodate children's play ideas. For example, children should have access to fabric, tape, and clothespins if they want to turn a table into a cave, or a slide into a giant's castle. Movable furniture and multi-tiered structures offer children opportunities to create spaces for group, partner, and individual play, as well as a wide variety of settings for their evolving stories.

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Open-ended materials and loose parts are integral components of an environment that supports make-believe. Children will use these to create their own props and augment their plots and characters. Beyond enhancing the play experience itself, open-ended materials encourage the development of representational thinking, which is at the heart of make-believe and literacy.

Stories

Perhaps the most significant way we can nurture the power of make-believe is by providing children with rich, meaningful stories. Children's literature is a vast smorgasbord, and they should have the opportunity to explore it all. Once they are familiar with them, children often weave the defined story structure and archetypal characters of folk and fairy tales into their play. Fairy tales model how the weak and powerless overcome adversity. They offer both this message of hope and the risk and challenge that children's brains need to wire themselves for resilience so they can overcome real-life adversity.

The supply of folk and fairy tales from around the world is seemingly endless. Variants of the same story (e.g., Cinderella) from different cultures offer the opportunity to provide ALL children with stories in which they see themselves reflected. In addition, children can explore the continuity among tales from very diverse cultural traditions, strengthening their connections to the plot and characters, which they can bring into their play. Children's interests (e.g., alligators, cows, or mirrors) can also be matched with folk and fairy tales that feature them, deepening their understanding of objects and symbols.

While many popular children's videos feature fairy tales, reading or telling stories more actively engages a child's developing representational skills, which are essential to make-believe play. Neuroscience research by Yabe et al. (2018) suggests that children's prefrontal brain activity is more active when they engage with a told story than when they read one from a picture book. While preliminary, their study nudges us to consider telling familiar folk and fairy tales in the oral tradition, in addition to reading the many beautiful picture book versions available.

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It is also important to listen to and validate children's many ways of telling their own stories. For example, Vivian Paley's work focused on what she called storytelling/storyacting as a bridge between children's fantasy play and their emerging literacy (Paley, 2004; Nicolopoulou et al., 2015). Children often have opportunities to dictate a story to a scribe, then act it out with the class. As in their play, children braid real-life experiences with stories they have heard as they tell their own tales. These told stories both draw from and inspire the play scenarios they create with their peers. And so, the spiral of the imagination swirls and grows.

Conclusion

Make-believe play is a pervasive and universal part of child development. It is an important way for children to develop symbolic thinking, interact with other children, self-regulate, and demonstrate agency and initiative. All of these contribute to the brain's capacity for resilience. In many settings, however, children are not given the time and space to engage in rich, meaningful pretend play.

Similarly, folk and fairy tales are often pushed from the early childhood environment. These ancient stories of using skill, wit, and courage to overcome adversity are sometimes seen as too fraught with danger and fear to share with children. Neuroscience, however, offers an alternative view: that stories of imagined risk and challenge are exactly what our brains need to prepare us to combat the very real stressors we experience.

Children seem to intuitively know what their brains need, in both make-believe play and in the stories that fuel it. They are drawn to themes of "trouble," even as well-meaning adults try to protect them from it. As play scholar David Kuschner describes it,

"Children's fascination with trouble includes such themes as power, the grappling with good and evil, overcoming adversity and confronting the monsters, real and imaginary, in your world." (Kuschner, 2019, p. 132).

In both their play and in the stories we share with them, we owe it to children to honor this fascination with trouble and risk. Even in settings where opportunities for physically risky play are few, every child can vicariously race down the beanstalk with

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Jack as he escapes from the angry giant. Beyond inspiring wild, joyful play, folk and fairy tales can set the stage for the neurodevelopmental blossoming of each child's adaptive capacity for resilience. However, this resilience gives every child the best chance of defeating the inevitable dragons they will encounter in life and living happily-ever-after in our challenging, ever-changing world.

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Reframing Early Art Experiences: How Process Art Supports Real Learning

Daniele Hunter, EdD

Introduction

The Product Art vs Process Art Debate

Two distinct types of art are most commonly used in early childhood settings. They are product and process art. Product art refers to closed-ended activities with step-by-step instructions and an end result that looks nearly identical across children (Bongiorno, 2014; McLennan, 2010). Process art, by contrast, has no predetermined end goal (McLennan, 2010), no step-by-step instructions to follow, and an end product unique to each child (Bongiorno, 2014; Capriotti, 2025). Given the differences between product and process art, it is no wonder there has been a longstanding debate in early childhood about which art is right for young children to engage in.

Problem Statement: Issues

Advocates of product art argue that these activities serve an important purpose for young children, teaching skills such as following directions and developing motor skills (Gift of Curiosity, n.d.). Additional advocates state that product art offers equal opportunities for all children to create and is well-loved by parents who receive these crafts (McLennan, 2010). While these claims hold some truth, some push back against product art, arguing that these same skills can be taught through process art experiences (McLennan, 2010). Process art advocates also claim that product art focuses on lower-level thinking skills and leaves little room for children's creativity (McLennan, 2010). Many also claim that this adult-centered approach lacks meaning for the children (Aussie Childcare Network Team, 2024). Furthermore, product art experiences often limit learning and do not match a child's developmental readiness. This disconnection can leave learners disinterested and frustrated (We Skoolhouse, n.d.) and should prompt educators to question whether these adult-centered experiences are worth the risk.

In contrast, process art advocates attest that these child-led experiences teach children valuable higher-level thinking skills, including creative thinking and problem-

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solving (Aussie Childcare Network Team, 2024; McLennan, 2010; We Skoolhouse, n.d.). Such skills are vital to children's lifelong success in the 21st century (Lindsay, 2015; McLennan, 2010). Process art also builds strong social-emotional skills, such as emotional regulation, confidence, and a strong sense of self (Early Bounce, 2025; We Skoolhouse, n.d.). Furthermore, process art celebrates each child's uniqueness, encouraging them to use their imagination and be proud of their work without pressure to be perfect (Early Bounce, 2025).

Rather than positioning process and product art against each other in this ongoing debate over which is better, the more important question is which of these two art forms effectively supports what we know about how young children learn during these early years. Through this focused lens, educators cannot only better support the children in their care but also advocate for more effective and appropriate teaching practices across early childhood settings.

Background

Knowledge is Constructed in Time, Not Forced

Several foundational theorists, including Jean Piaget, Lev Vygotsky, Jerome Bruner, and John Dewey, have identified that young children learn best with hands-on experiences that are meaningful to them in the moment and social in nature. Together, their shared views of learning laid the foundation for what is now called constructivist theory. Constructivist theory holds that learners build new knowledge through experience and interaction with a concept (McLeod, 2025). This theory has several key features, each drawing on the work of the aforementioned theorists.

The first facet of constructivist theory is that knowledge is constructed over time, not forced upon learners (Kretchmar, 2021; McLeod, 2025). Specifically, this theory maintains that learners are not empty vessels waiting to be filled with knowledge. Instead, learners build knowledge over time, based on their prior skills and understanding (McLeod, 2025; Purdy, 2021). This view aligns with both Piaget's theory of cognitive development and Bruner's spiral curriculum. Both emphasize that each new layer of development depends on the previous one (Madsen, n.d.; Purdy, 2021). Purdy

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(2021) compares this to building a structure: you start with a solid foundation and add layers until the structure is complete.

The constructivist theory also recognizes that children learn through interactions with peers, teachers, and their broader community (McLeod, 2025). This layer of the constructivist theory is greatly influenced by Vygotsky's sociocultural theory and Dewey's views on social learning. More specifically, Vygotsky highlighted how social relationships and cultural experiences shape learning, while Dewey emphasized that collaboration and shared problem-solving create pathways to deeper understanding (Kurt, 2021; Williams, 2017). Dewey's work also emphasized that true understanding is built when learners can connect meaningful context to the experience. In fact, Williams (2017) argues that teaching learners new concepts without meaningful context borders on unethical.

Drawing again on the work of Bruner and Dewey, constructivist theory emphasizes that learning is an active process rather than simply transferring information from adult to learner (McLeod, 2025). Active learning involves both physical and mental engagement, in which learners not only move their bodies but also use their minds to think, reflect, analyze, and solve problems (Kretchmar, 2021). Specifically, Bruner emphasized that children are not passive participants in learning but must be actively involved for new information to stick (Purdy, 2021). Dewey called this a "learn by doing" approach, in which children practiced new skills and concepts through hands-on activities (Williams, 2017). In short, while information may be passively conveyed to learners, actual understanding does not occur unless they have a chance to engage actively (McLeod, 2025).

While each theorist approached learning from different perspectives, they all share a fundamental belief that knowledge is constructed rather than imposed on learners. This belief has shaped not only the constructivist theory, as shown here, but also our understanding of how children learn. Within the context of the product-versus-process art debate, this belief calls for a shift away from adult-driven, closed-ended experiences and toward art opportunities that value exploration, choice, and the learning process itself.

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Strategies

Putting Knowledge into Practice

Shifting from a product art philosophy to a process art philosophy can feel like navigating uncharted territory and may meet resistance. However, shifting perspectives and practices in the classroom is less about changing the materials and more about rethinking how children are invited to use them as they explore and create. Educators can make several small changes that will slowly but meaningfully transform art experiences from an adult-driven craft space into a child-led environment where creativity and learning flourish.

Stock the Art Shelves

First, supporting process art requires a well-stocked art area. Shelving should be easily accessible to the children and contain a wide variety of art tools and materials. Children need clear guidance on safety rules and expectations, but when applied consistently, they will soon understand how to engage, play, and create independently in this environment. According to the Infant-Toddler Environment Rating Scales (ITERS) and the Early Childhood Environment Rating Scales (ECERS), well-stocked art areas should include a variety of materials, including drawing materials, paint, three-dimensional materials, collage materials, and appropriate tools (Harms et al., 2006; Harms et al., 2005).

Ask More Open-Ended Questions

When children engage in process art experiences, a teacher's role shifts slightly but remains incredibly important. Instead of guiding the process step by step, the teacher serves as an observer, a questioner, and a supporter. Asking open-ended questions will prompt children to think deeply about their work. These questions encourage children to think independently, solve problems, and value their voices. As teachers, sitting back and observing children at work will showcase their true knowledge and understanding, leading to more meaningful teaching decisions in the future.

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Loosen the Reins on Expectations

It can be hard to let go of expectations as an educator, especially when it feels like everyone is watching to make sure children are, in fact, learning. To embrace process art, however, educators must be willing to forgo these unreasonable expectations and outside pressure. Instead, educators must recognize and support the natural unfolding of every child's learning journey and give them the space, time, and tools to keep growing. In doing so, educators begin to advocate for experiences that value learning as a process, not a performance.

Let the Process Guide Your Practice

A simple shift in art practices that can guide educators toward embracing and practicing process art is to keep the experience's goals in mind and provide children with the right materials to achieve them. Maintaining this mindset helps educators stay child-centered, remembering that the learning process matters most, not the end product. In fact, keeping goals in mind will result in an accurate and fair representation of every child's learning.

Celebrate the Journey

In early years learning, each milestone matters. It represents their growth and serves as a building block for more complex understanding over time. From the first marks on a piece of paper to the more intricate drawings in a child's self-portrait, shifting towards process art requires educators to see and celebrate every milestone. These moments of celebration help shift onlookers' focus to the learning, growth, and discovery that naturally unfold when children are given the time, space, and tools to create in developmentally appropriate ways.

Conclusion

Product art and process art are fundamentally different art forms most commonly found in early childhood settings. This has led to a longstanding debate over which is better for young children. While product art may support things such as following directions and motor skill development, it is often misaligned with children's readiness, limiting their creativity, and is primarily driven by adults. Process art, on the

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other hand, supports children's naturally unfolding development, promotes higher-level thinking skills, and strengthens children's social-emotional development. Ultimately, the question is not about which type of art is better, but rather which approach aligns with how young children learn.

While children may grasp a concept taught by an adult, their true understanding does not develop unless they have a chance to learn in the way their bodies and brains are designed. This knowledge is built through active, meaningful, and social experiences that let children build on their prior knowledge. You can't pour it into children. As educators, the experiences we offer to young children must align with this belief. When it comes to art, process art supports every part of what young children need for long term learning to happen. It is both physically and mentally active, engaging children's bodies and minds as they manipulate tools, think creatively, question, and problem-solve. Process art allows children to work within their current developmental level, building seamlessly off of their prior knowledge with no expectation of meeting a goal they are not yet ready for. Finally, process art lets children think freely, drawing on their social backgrounds and community upbringing to create, imagine, and learn.

While putting this into practice might seem daunting for some, it is essential for early childhood programs. As central members of children's learning, growth, and development, educators must commit to shifting perspectives toward more valuable art practices. These changes don't need to be major; even small shifts can have a significant impact. Beginning with well-stocked art areas, educators can create a space that welcomes process art and the creativity, imagination, and learning it brings. By shifting engagement toward open-ended questions, teachers encourage children to think more deeply about their work. Letting go of unrealistic expectations placed on educators fosters teaching practices that honor each child's natural development. By keeping the goals of the experience in mind above the end result, educators can maintain art experiences that value the learning process and the construction of knowledge. Finally, by celebrating the journey of process art, educators can begin shifting onlookers' understanding, helping them see each milestone in a child's learning journey as a pivotal moment that lays the foundation for ongoing growth and development.

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Part 1: Where Did All The Play Go?
The Play Confusion: When Everything Is "Play," Nothing Is

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"The opposite of play is not work — the opposite of play is depression"
(Sutton -Smith 1997, p. 198)

Part 1 focuses on the issues that have led to a deficit in child-led play in early childhood settings and offers ideas for fixing a broken system. It asks: What is replacing child-initiated play?

Part 2 discusses how play continuums have contributed to the issues facing early childhood educators and provides strategies for getting back on track, what to use in assessment, and the tools needed to make learning visible.

Introduction

Children's childhoods have disappeared, and the shift away from child-led play diminishes their engagement and focus, making it hard for them to develop curiosity and explore the world around them. Instead of having the freedom and autonomy to learn through play, childhood has turned into 'getting ready' for a future filled with standardized tests and developmentally misaligned activities.

Children's play is being replaced by SMARTboards, iPads, Chromebooks, YouTube videos, flashcards, worksheets, homework, dance, gymnastics, softball, tutoring, teacher-directed classrooms, and daily schedules organized into small blocks of time that require too many transitions.

The early childhood profession needs to return to what we know works with children. To focus on the science of how children learn. To provide the time, space, relationships, and environment where children thrive. As Bev Bos reminds us, "The Child is the Curriculum" (Saia, 2016). This reminder may encourage educators and administrators to feel hopeful and proactive about restoring meaningful play in early childhood settings.

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To begin this exploration, educators must regain their agency; instead of asking, 'Why is it this way?' they must use their power to say, 'There is a better way to provide early childhood education.' Early childhood professionals must push back against 'readiness' pressures and unrealistic academic expectations that do not align with children's development, and share with families and administrators why child-led free play is how children learn. Advocating for this shift is essential for meaningful change in early childhood practices and for the profession to become *developmentally focused* rather than *planning activities that meet state standards*.

Problems/ Issues

"The education of even a small child, therefore, does not aim at preparing them for school but for life"

(*Montessori Series, 2007, p.322).*

What Happens ...

When policy decisions affect families' and children's access to health care, nutrition benefits, and public housing assistance programs, children's development is impacted. When natural disasters or violence take place where children and families live, children's progress in developmental milestones is affected.

Families who experience the disappearance of these programs are negatively impacted, and children who have these experiences cannot even begin to learn unless their basic needs, including food, restful sleep, shelter, clean air, and water, are met (Maslow, 1943).

When children experience child neglect, trauma, child abuse, anxiety, stress, depression, prenatal exposure to toxins, and a variety of other factors, their development is affected. These adverse experiences are cumulative and affect typical development (Perry, 2001; Kostelnik & Grady, 2009; Casey & Dewhirst, 2025).

Policymakers need to recognize the consequences of funding cuts. They should be held accountable for funding the basic needs of struggling families and creating communities where children feel safe and secure. This allows children to be curious, explore, and discover, critical steps for development.

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Development is Not a Race

In early childhood settings that set unrealistic expectations that do not match where children are developmentally, children experience increased stress and anxiety, which leads to behavior issues and a breakdown in building positive relationships (Miller & Almon, 2009). Ignoring the sequence of how development unfolds, pretending that each domain (cognitive, fine and gross motor, social, language, and emotional) develops in isolation, and failing to recognize that each child's progression through developmental milestones is unique has created a climate for learning that disrupts rather than promotes children's growth. (Elkind, 2007; Miller & Almon, 2009; Bassock & Rorem, 2016).

Children's development is shaped by their unique experiences, biological makeup, habits (such as curiosity or withdrawal), approaches to learning (such as choosing what to do), and how they explore new materials. Screen use also affects their development (Tatter, 2025).

Use of Technology and Screens

The emphasis on using technology in homes, early care and education settings, and public and private schools has created a situation where technology is replacing child-led play. In early care and education settings, SmartBoards, iPads, teachers' desks, or computers take up classroom space, often replacing active materials that children need to learn. Using YouTube videos to sing songs or read stories to children is not how children learn to read. Technology can limit opportunities for active engagement and tactile learning experiences that are crucial for development.

When parents are exhausted and just need to start dinner, or have time to help children with homework, children may get more screen time. Parents may feel uncomfortable with children playing outside, riding their bike, or playing with friends; this increases children's screen time. When families go out to dinner, instead of having conversations, you see busy parents needing to relax and de-stress from their day while children use screens. As you drive, you see car seats with young children playing on iPads or phones; in the grocery store, instead of looking at different vegetables and fruits and having a conversation, you see children on some type of screen. The lack of

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conversation and back-and-forth communication reduces opportunities to build the language and vocabulary children need to become proficient readers (Romeo et al., 2018).

Overuse of screen time has many adverse effects on social, emotional, physical, and cognitive development. Replacing outdoor physical activity with screen use can lead to obesity and sleep loss, which can affect school performance and lifetime health. Exposure to violence through video games, television, or the internet can contribute to behavior problems due to children being scared or trying to imitate the actions of on-screen characters (American Academy of Pediatrics, 2023).

In a recent study, Vanderloo et al. 2022 concluded that screen use in early childhood is associated with increased vulnerability in developmental readiness for school. The research showed that children who use screens are at increased risk of poorer language and cognitive development in Kindergarten. Although Bronfenbrenner was referring to television, it remains relevant today, with increased access to and availability of different types of screens.

The primary danger of the television screen lies not so much in the behavior it produces as the behavior it prevents - the talks, the games, the family activities, and the arguments through which much of the child's learning takes place, and his character is formed. (Bronfenbrenner, 1979).

The American Academy of Pediatrics (2023) recommends no screens for children 18 months or younger unless it is video chatting. For children 18-24 months, they recommend limiting screen time to short, high-quality programming, with parents viewing it with their children. For children ages three to five, regardless of the setting, they recommend no more than one hour of screen time per 24 hours. Parents should monitor screen time for older children and teens to ensure it does not replace family time, reduce sleep, or reduce physical activity.

Another insidious factor contributing to a play deficit is confusion over what play is and what it is not.

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Strategies

Recognizing the Play Aliases that Interfere with Children's Development

Children's spontaneous play has disappeared as the focus shifted to more structured, adult-directed activities, with teachers replacing exploration, discovery play, and access to recess with more time for academics. Sometimes the loss of child-led play or recess is restricted and used as a disciplinary consequence (Murray, 2026). Another factor is how the readiness movement has reduced time for play through longer school days and longer school years, all driven by an overemphasis on academic achievement. Parents' concerns about their child's safety have resulted in less neighborhood play and more structured, adult-led after-school activities (Patte, 2015; Murray et al., 2026). Ginsburg (2007) reminds us that highly scheduled children have less time for free, child-driven, and creative play. In early childhood settings, teachers struggle to recognize what play is and is not.

What Play Is Not!

- It is not a place where ancillary activities like dance, gymnastics, softball, or any other type of adult-led activity replace play.
- It is not a place where the curriculum comes in a box, binder, or mail, nor does it repeat the same weekly themes year after year.
- It is not a place where teachers group children by ability in academic subjects.
- It is not a place where children's voices are too loud, and all you hear is teachers' voices correcting, directing, or disciplining children.
- It is not a place where the teacher sees each child's development based on their chronological age. Chronological and developmental ages are very different. One child might be ahead of their age in some areas and behind in others.
- It is not a place where teachers use extrinsic motivation (stickers, a collective classroom reward such as a party, tickets, tokens, prize chests, small toys, certificates, doing jobs in the classroom and earning something, to name a few). Extrinsic motivators encourage children to do something for a reward, rather than teaching them to do something because it is the right thing to do.

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- It is not a place where children go hungry. Food must be provided. No child can learn when they are hungry.
- It is not a place where children are lined up to go to the bathroom. Children need to recognize when they are hungry and need to eat, and to listen to their bodies when it signals it is time to go to the bathroom; this is the beginning of self-regulation.
- It is not a rigid daily schedule that includes small chunks of time for teacher-directed or organized activities. The clock does not schedule the day. The schedule is not siloed by subject: math, literacy, music, circle, science, calendar, weather, worksheets. To build the foundations of learning needed, children need large blocks of time to play without teacher direction. The drive to play comes from development. They will play what they are ready to develop.
- It is not a place with primary-colored walls and carpets/rugs. Plastic toys in plastic baskets that offer no interest because children get bored with them, or there are not enough materials for them to play with a friend for at least an hour.
- It is not a place where the teacher selects which centers are open or closed, or which materials children use for an art product, or which centers they rotate through.
- It is not a place where children are fearful or hesitate to do something without permission.
- It is not a place where children are prevented from taking a material from one part of the room and moving it to a new location to play with.
- It is not a place that never explores what is outside the building and playground to ensure children have regular contact with nature.

Foundational learning experiences require active learning materials. Instead of purchasing passive learning materials such as Chromebooks, iPads, and associated apps, recognize that these devices do not promote development (Hirsh-Pasek et al., 2015; Madigan et al., 2019). You can include technology like an overhead projector that projects light onto the wall, with colorful materials so children can manipulate them to change the image and watch the changes happen in real time. Provide light tables with colorful manipulatives where children can build, sort, or manipulate materials, and light

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shines up through those materials; CD players, Old typewriters, and digital cameras for children to take images of interesting things are ways to use technology.

Conclusion

What You See, Feel, and Hear in the Setting.

Whatever the setting, what children see, how they feel, and what they hear all affect their development. What a teacher sees, feels, and hears also impacts the teacher. Children and teachers come from different cultural backgrounds, which can make children feel less safe or feel that their culture is not valued. Teachers need to be aware of how their cultural experiences may affect their ability to form loving, positive relationships. Here are a few things to consider. When you walk into your setting, does it feel welcoming to families and children? What does it smell like? Are there areas to get away? Is it comfortable?

What do children see? Is it visually overstimulating? Is it cluttered? Do you have enough materials for groups of children to play together? Is your daily schedule based on the clock or on the children?

What do you hear? Loud music or just music all the time? What type of music, yours or the children's? Do you hear crying and fighting, loud teacher voices, toys being dumped, chaos? If you hear this, the children are frustrated because you are too structured and they do not have enough time to play.

In Part 2, the paper discusses solutions and strategies for Part 1's problems, describes terms that have confused teachers, and explains how play continuums have been used to trick us into thinking they are play. Part 2 also compares the definition of child-led play with other definitions used to address the readiness movement. Part 2 guides you to reimagine an environment where children thrive.

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Part 2: Where Did All The Play Go?
The Play Confusion: When Everything Is "Play," Nothing Is

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Part 1 focuses on the issues that have led to a deficit in child-led play and offers ideas for fixing a broken system. It asks: What is replacing child-initiated play?

Part 2 offers strategies for getting back on track, the true definition of child-led play, what to use to assess children's development, scenarios, and the tools needed to make learning visible.

Introduction

Play has become confusing. To cater to the "readiness movement," early childhood teachers are bombarded with different terms used to describe play, or what others have called play-hijacked terms (Pyle & Danniels, 2017; Hughes, 2012; Sands, 2016). Have you heard of any of these? We play with a purpose; we play to learn; we use play-based strategies.

Recognizing that these terms dilute and erase play from early childhood will begin to rectify years of readiness preparation and return home and early childhood settings to places where children's laughter, joy, excitement, and curiosity can be felt, seen, and heard. Teachers and parents need the confidence and knowledge to push back on those who believe play is frivolous and only a break from learning (Yogman et al., 2018). When early childhood professionals see the value of child-initiated play, they can regain the joy and excitement of watching children's learning unfold during play.

Issues

The Play Continuum Confusion

When educators are asked to use one of several types of play continuums, they may think they are providing what healthy development requires. They may be encouraged to believe that descriptors such as guided play, teacher-directed play, purposeful play, play to learn, play-based learning, structured play, play with a purpose, and developmentally appropriate practices are all the types of play children need to

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develop. These play labels have shifted focus away from the importance of child-initiated play and led educators to believe they must plan more didactic, focused activities, increase large-group instruction, or increase small-group, teacher-led activities instead of allowing children to pursue their interests.

Recognizing the Play Hijackers (Pyle & Danniels, 2017; Hughes, 2012; Sands, 2016) embedded in the readiness movement will help restore the characteristics of child-led free play.

The Play Hijackers

- **Teacher Interrupted Play** - Play that originates from a child's interest or curiosity. However, the teacher interrupts it to extend it by asking open-ended questions or introducing tools or additional resources without child input.
- **Teacher Guided** - Merges children's interests with the teacher's intentional learning goals; it is not based on children's development, but may be a technique used to meet a state standard with the teacher leading. Children are required to participate; it does not meet a specific developmental need. Though it may be based on children's interest, it is not child-led.
- **Teacher Planned** – Not initiated by children's interests; instead, structured by the teacher to target specific academic concepts or skills, and carried out with materials like cut-out shapes that are designed to make a product and have nothing to do with the process of creativity, cooking experiences, where the teacher does all the measuring and mixing, science experiences, and literacy experiences. Examples also include the teacher choosing the book, songs, and fingerplays without children's input or in ways not related to children’s interests.

Teacher-directed - Not based on children's interests. Highly structured, explicit teaching, led by the adult.

- The teacher chooses which centers are open and how many children can be in a center at the same time.
- The teacher chooses which manipulatives to open and when circle or Group Time begins.

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- Telling children when it is time to go to the bathroom, lining children up to go to the bathroom, playground, etc.; clean-up time; any transition throughout the day; a schedule that segments subjects, music, language, literacy, art, science, math, breakfast or lunch, time, snack time, nap time, large group instruction with everyone doing the same thing at the same time.

The Issues You Face

Making Meaningful Change

What should teachers do?

White (2012) describes the adult's role as preparing an environment filled with exciting materials, experiences, and objects that promote exploration with open-ended items that can be used in a variety of ways. The adult prepares an environment that fosters curiosity and discovery. The adult listens to children's conversations to identify and use these interests by enriching the environment with new materials to explore.

The Environment and Positive Child Relationships

The teacher's role is to curate an environment that offers enough materials for several children to play at the same time without it appearing cluttered or disorganized. Centers, such as blocks, creative art, housekeeping, manipulatives, book area, science, sensory, and makers areas, can be easily expanded or reduced based on children's interests.

- Store materials in woven baskets or other natural containers.
- Where materials live should be obvious. For example, put a picture of what goes in the container on the inside bottom of the container, so it is easy for children to see where it goes when it is empty.
- The teacher lets children move materials between areas to support their play.
- The environment is comfortable, welcoming, and home-like, with lamps that replace overhead lighting.
- Natural light comes through windows so children can watch bird feeders and squirrels, see trees, flowers, and plants change with the seasons, watch the wind blow, and hear and see the rain and snow.

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- The setting offers living things, things that grow and can be observed both inside and outside. Children help care for them.
- The room is comfortable and has soothing wall colors, lots of natural open-ended loose part materials like tree cookies of various sizes, and natural elements like cotton, other wooden pieces, colorful objects you might find at a discount or thrift store, real items that children can use that represent the cultures of the children in your setting. Consider active equipment, like a hand-crank apple peeler that removes the skin, real pots and pans, a rolling pin, wooden spoons, and cultural cooking utensils in the housekeeping area.
- The room should smell good, represent the cultures of the children in the classroom, have lots of photos of children and their families, and include a comfortable chair or bench where parents can sit while dropping off or picking up.
- A place where every child is welcome, the teacher knows their interests, and listens to children as they ask a question. The teacher uses "I wonder where we could find that?"; I wonder what we have in the room that you could use to make that? All without answering the question, but engaging children in creativity and problem-solving as they consider what they could use or do.
- A place where children run into the room, grab a hug, are excited to be there, and cannot wait to play; where children know the room is theirs to discover and play; an environment that builds positive relationships, and a place where children thrive.
- A place where children learn to listen to their bodies, know when they need to go to the bathroom or when they are hungry, and can meet these needs independently.
- A place where children are viewed as capable and competent, and snacks are available for at least two hours during the morning or afternoon so children eat when they are hungry. Children wash their hands before snack. They can eat a snack with a friend. Snacks are self-serve. Children are provided with rebus photos of snacks and what equals one serving. Measuring cups, tongs for picking up items, and a small pitcher and cups for pouring juice, milk, or water are available. More snacks are available if children are still hungry.

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- For most of the day, children have child-initiated play inside or outside on the playground, or at the park. Children need to be outside in nature for at least two hours per day, regardless of the weather. Exceptions include weather conditions such as thunder and lightning, hail, tornadoes, flooding, or strong wind, etc.
- Throughout the day, the teacher observes children's play without interfering.
- The teacher listens to what children are saying and doing, stays available if an issue arises, and teaches children how to resolve conflicts. When the teacher uses the strategies below consistently, children begin to resolve their own conflicts.

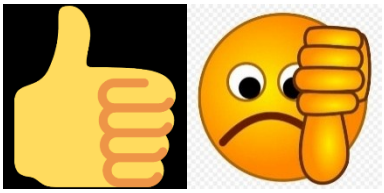
Conflict resolution steps

What happened? For a single child or for more than one, each gets to tell what happened

How did it make you feel? Have an emotion chart so children can point.

What could you do to resolve the problem? If they have one, then move on.

Is that a good choice or a bad choice? I had Thumbs Up and Thumbs Down Images in my pocket on laminated cardstock.



- What else could you do?
- Why don't you try it and see if it works? The teacher stays close but lets the child implement it.
- If the other child does not listen, the teacher says, "I will go with you while you try again," but says nothing; she/he stands behind the child, observing.

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Strategies and Solutions

Reframing What Play Looks Like in Early Childhood

What Children Need to Develop and Learn

The Teacher's Role in Communicating and Implementing Child-Initiated Play

Teachers need tools in their tool belt to observe and determine each child's individual development in the foundations of learning. Teachers must know how to use tools and descriptive scenarios to support children without turning activities into teacher-planned or teacher-directed activities. These tools help you collect information to share with families, reflect on your teaching practices, and determine what you might need to adjust or change to foster the brain connections that form the foundation of future learning.

These strategies may differ from what you might currently use. State standards are not included in what you should be observing. Instead, you will see ways to collect evidence of each child. Part II offers suggestions for how often to observe and collect data, ways to share that information with families, and questions to help you reflect on your practice. You might be asking, when do I have time to do this? Reframing your definition of child-led play and its elements will create a setting that provides the time you need. So, let's get started.

Peter Gray's definition of play makes clear that when others introduce play as a continuum, they do not understand what play is. Peter Gray (Gray, 2013, p.140) offers the simplest and most explicit definition of child-initiated play. Child-initiated play is…

- **Self-chosen and self-directed:** Players freely choose to participate and decide how the activity unfolds, without adult control.
- **Intrinsically motivated:** The activity is done for its own sake. The process and the experience matter more than any final goal or external reward.
- **Guided by mental rules:** Players follow internal concepts or agreed-upon rules that require conscious self-restraint.

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- **Creative and imaginative:** The experience involves an active, alert mind working within a simulated or fictional context that breaks away from ordinary reality.
- **Relatively non-stressed:** It is conducted in an alert and active frame of mind, but one that remains free from intense pressure or anxiety.

Scenarios for Supporting Play

Scenarios of Teacher-Scaffolded Play and Provocations: Notice that all elements of child-initiated play are present.

Teacher-Scaffolded:

Scenario 1: Without being obvious or getting too close, the teacher carefully observes the children engaged in child-initiated free play. The teacher listens and takes running records or time samples of what the children are doing. The teacher listens carefully for raised voices that do not sound exciting and may be a disagreement. The teacher may also listen to children discussing something they need. Whatever the scenario, the teacher waits to see whether the children can resolve the issue or find a creative way to get or make what they need. If the children resolve both scenarios on their own, the teacher quietly walks away. If the children ask for help or the disagreement escalates, the teacher asks open-ended questions to help the children reach a solution.

- *Example: Children need something to continue their play and ask for help. The teacher asks questions like, "Hmmm, do we have something like what you are looking for in another area of the room?" Alternatively, "I wonder if there are materials in the room you could use to make what you need?" The teacher never solves the problem.*
- *Conflict: If children are in conflict, have not been able to solve the problem, and look for help, the teacher asks, "What happened to one child?" How did that make you feel? What should you do? Or what have you tried? (ensuring the statement is a good choice) The teacher suggests, " Go ahead and try again. If it is not a good choice, the teacher asks, " What else could you do? The teacher*

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repeats the same questions with the other child until they can resolve the conflict.

Provocations: *The teacher carefully observes children at play, using authentic observation strategies to assess each child's level of development in all domains. The teacher intentionally listens to children's conversations, perhaps conducting a language sample by writing down children's questions or interests. From these conversations, the teacher may plan a provocation that will be available the next day. No child is required to participate; the teacher does not guide or direct, and it happens only because of children's interests.*

Building the Foundations of all Future Learning

Instead of reading skills, math skills, writing their name, or a myriad of other ineffective learning activities. This section provides content for what teachers can observe. This includes how children approach play, the habits they use in play, where they are in the learning cycle, how they use schemas in play, how those schemas are evolving, and where they are in the developmental milestone domains. These tools are not meant to correspond with the child's chronological age. Instead, they provide information on their developmental age. See the link to the free CDC Developmental Milestone Charts in the Reference section.

Approaches to Learning

Approaches are how children approach or engage in learning. During the day, the teacher authentically observes a child or children using the approaches-to-learning indicators. Identify where the child is by highlighting the indicators, then provide a running record describing the child's progress. Date the form. *Do this at least once per quarter,* and use it to explain to families how children learn the foundations of all future learning.

Reflect: *If children's approaches are limited, the teacher should ask what could be changed or added to scaffold the child's approaches. These observations go into their portfolio to share with families.*

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Curiosity and Initiative	Persistence and Engagement
Selecting Activities Independently	**Staying focused and finishing what they started**
Asking Open-Ended Questions	Working Through Challenges or Frustrations
Exploring new materials	Returning to an unfinished activity or long-term project
Initiating Play or Showing a Preference	-
Planning, Cognitive Flexibility, Problem Solving, Seeking Help	**Self-Regulation and Task Management**
Planning is setting a goal for what they want to do.	Moving from one activity to another with minimal stress or guidance
Cognitive Flexibility is taking a material and using it in a non-traditional way	Following a 2- or 3-step direction
Asking for help or assistance when they recognize they are stuck and cannot accomplish what they set out to do.	Demonstrating impulse control by waiting for a turn or sharing toys.

Source: (U.S. Department of Health and Human Services, 2015)

Positive Learning Habits

Another foundation for future learning is developing positive learning habits. Teachers should provide large blocks of time, at least 1-2 hours of uninterrupted play several times throughout the day, both inside and outside. Children engage in child-led play, and the teacher/s conduct authentic observations to identify which positive habits they have developed and which negative habits are present.

Reflect: *If negative habits are present, ask what you could provide that is aligned with the child's interests. One strategy is to ask the child, What would you like to see added to the environment?*

Observe the habits in both columns for each child using running records or by printing this sheet; *do this at least once per month*, and track the children's positive habits as evidence to make learning visible.

Reflect: *Ask yourself: Are you giving children opportunities to develop Positive Habits, and are you reflecting on what more you can do?*

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Positive Habits of Learning	Habits that Interfere with Learning
Being Curious	Lacks Curiosity
Showing interest in exploring the environment	Looks around, not able to choose where to play
Engaged in an activity they selected	Only able to stay with one activity for a short time
Exploring new materials	Cautious of approaching something new
Taking initiative	Waits for someone to direct them
Demonstrating Independence	Not able to play
Asking open-ended questions	Not asking questions
Expressing their interests	Crying, throwing a temper tantrum
Sustaining focus on their selected activity	Easily distracted
Persistence	Unable to keep trying
Returning to a long-term project after an interruption.	Abandoning their play
Setting a goal	Unsure what to do or where to start
Trying new ways to accomplish the goal	Giving up
Using materials creatively or in a non-traditional way	Only using materials in the way they are designed to be used
Seeking help	Being helpless

Source: (Yogman et al., 2018)

Fostering the Development of Autonomy and Agency

Autonomy is an internal developmental milestone reflecting the child's ability to think independently, make decisions, and regulate their body (OECD, 2021). Look for attempts to solve issues or situations, such as a conflict with a peer, without adult interference. Look for awareness of their body. When children decide they are hungry and take steps to eat a snack, can they dress themselves? If so, what clothing have they mastered? Hanging up their backpacks and coats, keeping track of their items. Showing that they are doing things because it is the right thing to do (intrinsic motivation) without seeking adult approval or a reward. Emotional self-regulation, managing impulses, and recognizing when they feel overwhelmed or need a break. Developing autonomy helps them wire their brains and build the foundation for future learning.

Observe each child's development of autonomy each quarter, and provide progress notes in the child's portfolio.

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Agency represents the child's right to express views and initiate action. This includes choosing where they will play, whom they will play with, and what they will play (OECD, 2021). Indicators of child agency include child-led play, access to materials, and the ability to decide how and when to use them. Children also have input into classroom rules, what they want to learn, and the daily routine. Children can express preferences, ideas, or disagreements, and teachers incorporate them in the setting. Agency helps wire their brains and build the foundation for future learning.

Observe each child's agency at least once a quarter. Write down brief descriptions of their progress in thinking independently, making decisions, regulating their body, solving problems or issues, and building self-help skills.

Reflect: *Ask yourself how you are providing opportunities for children to develop Agency and Autonomy and adjust as needed.*

Learning Cycle

The learning cycle is another tool that teachers can use to see where children are in their ability to complete the entire cycle with one activity the child selects. Do this each quarter and place it in the child's portfolio. How children move through the Learning Cycle is one way they wire their brains and build the foundation for future learning. You may date each observation and highlight the steps they accomplished with one activity they selected to track development.

Reflect: *Do children have enough opportunity, materials, and time to complete the learning cycle?*

Curiosity	**leads to**	**Exploration**
Exploration	**leads to**	**Discovery**
Discovery	**leads to**	**Pleasure**
Pleasure	**leads to**	**Repetition**
Repetition	**leads to**	**Mastery**
Mastery	**leads to**	**Confidence**
Confidence	**leads to**	**Self Esteem**
Self Esteem	**increases a**	**Sense of Security**
Sense of Security	**results in**	**Curiosity**

Perry (2001)

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The Importance of Schema Play

In Piaget's Theory, he describes how children construct knowledge by using schemas (Piaget, 1954). Heather Bernt-Santy (2025) discusses Chris Athey's research exploring Piaget's discussion of schemas.

Schemas are patterns of behavior and thinking that children exhibit during child-initiated free play (Bernt-Santy, 2025). Children do not recognize what they are doing or why. Schemas are innate brain-wiring patterns of repeated behaviors children use to make sense of the world around them.

They are not a once-and-done activity. They happen as children develop, starting in infancy. Children will continue to practice each schema with different materials, in different locations (indoors, outdoors). Each time a child repeats a schema, they are strengthening the connections in their brain. Schemas show how play forms the foundation for future learning.

Observe schema play often, use the form below to describe what children were doing, and take a photo of what they did, placing it in the child's portfolio.

Reflect: *As you observe schema play, ask yourself how you can provide engaging materials that children could use as they develop and strengthen their schemas. Caution: The teacher does not model or teach schemas.*

Schema Observations

Positioning **Lining things up, creating patterns**	

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The Transforming **Mixing things to make something new**	
Orientation **Looking at themselves, or objects from different angles, upside down, etc.**	
Transporting **Moving items from one area to another area** **Different containers or objects**	

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Rotation **Move, spin, rotate, and twist objects or move their bodies in this way**	
Trajectory **Throwing things, swinging, watching things bounce, building blocks, knocking down**	
Connecting **Putting things together, taking them apart, linking**	

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The Enveloping **Completely hiding objects or themselves. Building forts, hiding in clothing racks, burying themselves in blankets and pillows**	
Enclosing Schema **Children exploring the enclosing schema like to contain things using borders and enclosures.**	

Adapted from Bernt-Santy 2025

Schemas are a lifelong skill. Here are just a few examples.

- Transporting items while grocery shopping, moving furniture
- Lining things up in the pantry or organizing tools for a project.
- Rotating things as you cook or design.
- You transform items as you cook.
- You use orientation and connecting schemas as you build something with instructions.

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- You use the enveloping schema when you pull the covers over your head; alternatively, when you hide yourself in a tent while camping.
- You use the enclosing schema when you plant flowers or rearrange your furniture.
- You use the trajectory schema when you play a sport or throw a ball.

Developmental Milestones

Use developmental milestones from the Centers for Disease Control and Prevention: U.S. Department of Health & Human Services. These are free and range from 2 months- 60 months. Observe developmental milestones at least twice per year and share them with families.

Reflect: *Keep a set with ages to monitor the child's development and know when a referral for screening might be advised. When sharing with families, remove the chronological age and show which milestones the child has reached. You can cut and paste from different age groups to accurately show and share where the child falls across each domain for each family.*

Developmental Milestone Charts

Conclusion

Pushing Back and Reviving Child-led Play/Free Play

Redefining the role from teacher to play facilitator is how to institute child-led free play. Here are some tips to get you started.

- A facilitator who acknowledges that children are capable rather than needing teacher guidance and control, and who recognizes and values child-led play as a biological necessity rather than a break from learning.
- Is aware that children's chronological age does not align with their developmental age and uses the Centers for Disease Control and Prevention (2025) to determine each child's development.
- Makes learning visible to parents and administrators by using authentic assessment strategies, work samples, photographs, documentation boards, running records, and other artifacts.

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- Uses knowledge gained through observations to enhance the environment based on children's emerging interests or inquiries
- Uses these interests as the source for a project or study, moving away from purchased or teacher-determined curriculum or repetitive monthly themes.

In Part 1, you have been given some reasons for the play deficit.

In Part 2, you have been given some strategies for pushing back. These papers do not cover all the reasons early childhood educators struggle to provide child-led free play. If this topic interests you, there are many more authors in the 2026 IPA USA White Paper and in the 2024 IPA USA White Paper. These are excellent resources for you and can be found at IPAUSA.ORG/WHITEPAPER

The Case for Play

An important next step is to gather the language you feel comfortable using to "push back" on what harms children's development and "push in" on child-initiated free play. Frame them, and put them up on walls or in the hallway so visitors and families can see why child-initiated FREE play is how children learn.

The following resources are just the beginning of your journey to protect childhood. Included are quotes from theorists that describe how child-led play is a biological necessity for building the foundations of future learning. Myths about play and school readiness, a link to the U.N. Article 31 on the rights of the child to play. Information from the American Academy of Pediatrics about child-led play. Some of these suggestions are also on the Reference page.

- In 2025, the American Academy of Pediatrics reaffirmed a 2018 clinical report, The power of play: A pediatric role in enhancing development in young children. *Pediatrics*, 142(3), Article e20182058, by stating, "Child-led play is a singular opportunity to promote the social-emotional, cognitive, language, and self-regulation skills that build executive function and a prosocial brain. Furthermore, play supports the formation of the safe, stable, and nurturing relationships with all caregivers that children need to thrive." That play builds executive functioning. "Play is not frivolous: it enhances brain structure and function and

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promotes executive function (ie, the process of learning, rather than the content), which allows us to pursue goals and ignore distractions," and warns that when play and safe, stable, and nurturing relationships are missing, "toxic stress can disrupt the development of executive function and the learning of prosocial behavior, (para 1-3).

- The American Academy of Pediatrics describes child-led play as essential to cognitive, language, physical, social, and emotional development, along with positive, loving, and consistent relationships as children play (Ginsburg, 2007).
- To see how the brain creates connections, examine how neural pathways develop. Free play creates these neural connections, promoting development across physical, social, emotional, and cognitive abilities. Free play wires the brain for the skills we will use throughout life. These skills include "physical agility, social confidence, emotional regulation, creativity, and resilience (Brown & Vaughn, 2009).
- In the book Play Across All Spaces, edited by Erin Casey and Courtney Dewhirst (2026), we gain more insight into why child-led play is a biological necessity for young children's healthy development.
- Ginsburg (2007) explains the benefits of child-initiated play, describing opportunities to use creativity, imagination, and physical, cognitive, social, and emotional strength, which are development's building blocks.
- Myths about Play and School Readiness- Please note my description of where I got these and verify before using.
- Children's development: NAEYC (2020) explicitly establishes in Principle 1 that all domains of child development—cognitive, physical, social, and emotional—are interrelated and interdependent, meaning development in one domain influences and is influenced by development in other domains.
- Panksepp states that "play is not just something that keeps kids busy, but instead 'activates fundamental biological systems that support learning and development,' p. 5.
- Panksepp (2007) reminds us that brains are wired for play, which allows us to adapt to new experiences. Panksepp (2007 continues by stating that play allows the brain to adapt to new experiences.

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- Pellis and Pellis (2009) describe how child-led play stimulates development in the areas responsible for executive function and social and emotional development.
- Bruce Perry (2001) discussed how play contributes to children's understanding of the world around them. With the school readiness movement focused on academics, Perry reminds us that a child's curiosity and active exploration of the environment fuel development. As this cycle repeats, children's curiosity and motivation grow strongerPointer (2026, para. 1): "Play is crucial for supporting healthy development; promoting stable, nurturing relationships; and mitigating toxic stress. A child's play experience can impact their physical, mental, and social-emotional health outcomes."
- Porges (2009 describes how play supports our ability to handle stress and connect with others when children's play promotes enjoyable interactions.
- PowerPoint of my slides from theorists. I have permitted you to edit -PowerPoint Slides of Theorist Quotes
- Schamuhn, T. (2024, November 6). The Power of Play with Peter Gray [Episode 105]. The Child Psych Podcast. Spotify/Publisher.
- Stuart Brown (2014), a leading psychiatrist, author, and founder of the National Institute of Play, discusses how play deprivation disrupts normal development of social, emotional, and creative problem-solving and can carry serious consequences for the individual and the public.
- The United Nations Convention on the Rights of the Child (UNCRC) recognized childhood as "a special, protected time, in which children must be allowed to grow, learn, play, develop and flourish with dignity." Article 31 states, "Every child has the right to rest, relax, play and to take part in cultural and creative activities.... Children also need leisure, defined as time and space without obligations, entertainment, or stimulus, which they can choose to fill as actively or inactively as they wish" (United Nations, 1989, Article 31).

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Explorers and Detectives: The Multimodality of Children's Literacy Development Through Play and the Role of the Educator

Emma Melo, BA

Introduction

The decision to research the topic of children's literacy development through play came about as a request for a faculty professional development on supporting emergent literacy, and my own fascination with how educators in Reggio Emilia refer to the "mysterious signs and symbols" of emerging literacy and numeracy as "the codes" (Chieli, 2025). In 2025, I attended the Students and Professors Study Group, L'approccio educativo di Reggio Emilia, at the Loris Malaguzzi International Center in Reggio Emilia, Italy, to deepen my understanding of Reggio Emilia's innovative approach to early childhood education.

I came to the conference seeking answers to many questions, including how literacy is learned and taught within the Reggio Emilia context, and whether there was any formal preparation for primary school. After three days of attending presentations, studying documentation and artifacts of children's work, visiting schools and ateliers, and conversing with teachers and pedagogistas, it became clear that children in Reggio schools were developing complex literacy skills and habits through play and project work, without formal academic or prescribed curricular instruction. Instead, the teacher's role was to help children "fall in love with the codes," or in other words, to support the journey and natural desire through which children explore, use, play with, and make meaning from the "fascinating and mysterious" marks, signs, and symbols of their culture (Chieli, 2025).

As an ECE practitioner who appreciates the complexity of both children's learning and the role of the teacher behind this simple statement, "falling in love with the codes," I was led to ask the following questions: how do children develop literacy skills and habits through play; how can early childhood educators support emergent literacies and protect play; and, how are children's use of "the hundred languages" as termed by the Reggio approach (Edwards et al., 2012) evidence of developing literacy skills?

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I am the Pedagogical Coordinator at the Highland Presbyterian Church Nursery and Weekday School in Louisville, KY, USA, where I facilitate emergent and contextual curriculum, project work, and professional development. I am also a faculty member in the children's program at the Louisville Ballet School and a lifelong dancer. I am an early childhood education professional, an advocate for children's rights, and a promoter of the arts. I firmly believe that the early childhood years are the most important time for the development of the human brain and body, and that the early childhood educator plays a crucial role in supporting and facilitating this growth. As an artist and educator who embraces the pedagogical philosophy of "The Hundred Languages of Children" (Edwards et al., 2012), I know firsthand the value and legitimacy of human expression through multiple modes and media. I also believe the professions of ECE and arts education are undervalued and under-supported, and I aspire to amplify the voices and work of children and educators who have historically been unheard and unseen.

In researching this topic, I selected publications mostly from the last five years within a constructivism paradigm that aligns with my teaching and learning philosophy. I also chose postmodern research paradigms that challenge dominant, narrow, or static thinking. The methods and tools used to collect and interpret data (Mueller et al., 2024) are familiar to my pedagogical practices of observation and documentation.

Background

Current frameworks conceptualize literacy as being social, cultural, contextual, and multimodal (Torres-Begines et al., 2025). Multimodal literacy refers to a flexible and expansive repertoire of expressive communication and meaning-making, including sound, movement, gesture, gaze, marks, symbols, digital expressions, signs, silence, language, and artistic expression. It expands a traditional definition of literacy beyond dominant and privileged text and verbal modalities and systems by attending to "acts of meaning" and "literacy events," interactions, and "unseen" or "minor" encounters that children have with literacy (Boardman, 2022; Edwards et al., 2000; Lancaster, 2014; Smith, 2021; Theodotou, 2024). According to Hennison (2013), who researched the interdisciplinary ways children explore literacy and numeracy to "decode" their

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environments and make sense of their experiences, children seek and use multimodal literacies with a variety of media to express ideas, reason, problem-solve, collect and organize data, communicate, and create meaning. This blurs the traditional boundary between thinking and approaches that separate the fields of "math" and "literacy." Children and infants are naturally holistic and integrative in their communication methods and use what Reggio Emilia schools call "the hundred languages" to convey and support different stages of expression and meaning-making (Edwards et al., 2000). Theodotou (2024) calls this "the pedagogy of modalities," which she believes is critical in early childhood settings to understand how young children communicate and express thoughts through diverse modes beyond traditional spoken and print methods. This integrated and interdisciplinary multimodal approach to literacy aligns with Howard Gardner's theory of multiple intelligences (Gardner, 2024), which theorizes multiple ways of knowing and learning, and offers broader perspectives and amplified meaning (Edwards et al., 2000), especially if we consider how children socially construct knowledge through play about the world around them.

As we consider this expansive view of literacy, education policies in many countries are narrowing their approach to early literacy development, focusing on systematic curricula, mandates, and demands for quantifiable learning outcomes (Boardman, 2022). In contrast, children demonstrate an innate desire to communicate, share ideas, understand, use, and make meaning with the codes, signs, sounds, letters, numbers, and symbols of their culture through play. They also demonstrate comprehension and skills in their multimodal and collaborative explorations of literacy by using and creating marks, drawings, gestures, movements, sounds, and symbols, including those of their own invention (Lancaster, 2014; Smith, 2021; Theodotou, 2024). This provides evidence that child-led methods of exploring literacy (Theodotou, 2024) and the Reggio Emilia approach of the "hundred languages" (Inan, 2021) effectively support literacy development. Therefore, we can deduce that if these methods are considered play-based learning, then intrinsically motivated, playful exploration of cultural signs and symbols is indeed a way to "fall in love with the codes" (Chieli, 2025). So, as practitioners, we must ask ourselves: what should we pay attention to to see this evidence for ourselves?

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If children learn *through* play, it makes sense to closely observe and listen *to* their play to examine and hypothesize what they are trying to learn. Multiple studies document playful literacy events where children were observed using literacy with meaning and purpose, demonstrating skills and writing habits prior to formal teaching of skills, thereby challenging the binary thinking of play/rest and work/leisure (Henningson, 2013; Smith, 2021; Theodotou, 2024; Torres-Begines et al., 2025; Yopp & Yopp, 2009).

Smith (2021) describes an overlap between children's literacy events and play as a symbiotic relationship, showing evidence that children use literacy as part of their play and that exploring literacy can be considered play. Smith's (2021) research points to a widely accepted definition of play as intrinsically motivated and pleasurable, and draws a parallel to how children also show a natural interest in sharing and using familiar cultural symbols. Smith (2021, p. 149) calls this sociocultural relationship between play and literacy "playful writing," in which literacy and play benefit each other in ways that are intrinsically motivating, collaborative, enjoyable, and social. Smith (2021, p. 152) suggests "playful writing provided children with feelings of excitement as well as togetherness, for example, when they wrote cards for each other, or created treasure maps together." Theodotou's (2024) research similarly shows that children, without any prior formal instruction, demonstrate literacy skills and engage in writing activities during play that reflect their own experiences, such as creating messages, invitations, and signs.

Holm and Ahrenkiel (2024) focus on the multiple functions of language play, in which children primarily use sounds, body movements, and the manipulation of objects or materials to create structures such as rhymes, rhythms, repetition, and patterns. Holm and Ahrenkiel (2024) referred to what Kusters et al. (2017) call the "semiotic repertoire" of multimodal communication, or the "totality of resources" children engage in socially and playfully. Interestingly, in my own documentation, I had begun calling the collective, intentional, and often jubilant, if not defiant, noisemaking of infants and toddlers, "glee parties," only to discover that Holm and Ahrenkiel use the term "glee concert" to describe the same phenomenon. By observing and appreciating the meaning behind children's "glee concerts," including the sounds, dynamics, repetition,

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movements, word play, nonsense rhymes, etc., we can learn that children are socially and "formally" practicing complex language skills and developing paths to literacy (Holm & Ahrenkiel, 2024). These sound, language, vocalization, and word-play exercises build phonological awareness, which lays the foundation for primary-grade phonics and reading instruction. Holm and Ahrenkiel (2024) found that children also used language play in combination with body movements and object manipulation, such as toys, puzzles, or materials, as possible means to communicate beliefs and identities, to compete for or attract attention, create soundscapes, explore power, reflect on emotion, disagree, co-construct, and improvise. This supports evidence that children are integrative and multimodal in their language play, expression, and comprehension, layering meanings, sharing knowledge, and exercising social/emotional dynamics and skills in their language play.

Further demonstrating the complexity of children's emergent literacies, Lancaster (2014) studied the mark-making and graphic artifacts of children's mappings and inventories, observing how children could create frameworks and structures of symbols and marks. This "symbolic architecture" may be considered pre-syntax, given its similarity to the syntactic arrangements of formal writing systems (Lancaster, 2014). We can then draw a parallel to what Holm and Ahrenkiel (2024) observed: children may also create frameworks of sounds and movements within patterns, rhymes, rhythms, and dynamics.

How then can learning environments support this intrinsic desire to play and learn? Children search for meaning through an innate drive to interact with people, things, and places. Therefore, literacy- and language-rich environments that are motivating, contextually and culturally meaningful, and aesthetically appealing can provoke and support children's explorations of literacy. (Edwards et al., 2000; Inan, 2021; Theodotou, 2024). Smith (2021) defines writing as a byproduct of the creative relationship between the human and the non-human (i.e., tools, materials, time, space, and movement), suggesting the non-human as a protagonist with creative properties or affordances. This idea of a richness of available media for children that offers infinite possibilities for creative action is widely supported. Edwards et al. (2000) affirm that choice, affordance, variety, time, and access to materials and media can enable or

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restrict opportunities for creating messages and communications. The unique interactions of the human and non-human protagonists also vary depending on time, place, mood, weather, light, and many other factors. Therefore, learning environments must be spaces that motivate children toward creative action. If creativity and relationship-seeking are not happening, despite adults' perception of a rich environment, we might ask ourselves as practitioners: what do we need to change or add to motivate children's intrinsic desire to make meaning?

In their challenging post-qualitative article, which aims to "trouble" mainstream adult thinking, definitions, and approaches to literacy, Torres-Begines et al. (2025) suggest the ability of humans and "more than human" (in particular, but not exclusive to spaces and things) to have individual agencies and creative abilities in their unique "intra-actions." They suggest, "these unruly edges shelter the emergence of wild literacies, that is, those which are in the messy and provisional area between 'literacy' and 'not literacy'..." (Torres-Begines et al., 2025, p.213). While this deconstructive and critical thinking is on the outer edge of mainstream theories and may give us pause, it supports the well-documented creative and constructive potentiality between children and a variety of tools and media, and asks us to disrupt traditional and dominant definitions of what is literacy, who is literate, how we learn literacies, and who gets to decide. This stance also challenges a deficit lens often held by adults and those in positions of power by supporting a broader definition of literacy through the holistic view of multimodal literacies. Therefore, if we are to create literacy rich, motivating environments that support multimodal expression and meaning-making, then we might consider this challenging stance of Torres-Begines et al. (2025) who suggest in their critical study that "children's spaces" should be places for educational opportunities, co-construction, literacy events, and relationships, not "spaces for children" created by adults, where children are deemed "safe" and the adults are off-duty.

Appropriate Strategies

As stated in the Convention on the Rights of the Child (1989), children have the right to play, leisure, arts, and culture, to have a voice, to express themselves, and to freedom of thought. This means children have the right to a playful childhood where

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their voices and ideas are heard. They have the right to participate in decisions that affect them; therefore, children deserve to be seen by adults as competent to direct and participate in their own learning and interests. In their multimodal use of literacies in play and observed literacy events, children demonstrate empowerment, pride, leadership, focus, decision-making, collaboration, confidence, joy, empathy, and agency (Henningsen, 2013; Smith, 2021; Theodotou, 2024). However, a contradiction exists in education policy: it acknowledges that play, open-ended by nature, is the primary mode of children's learning, yet it focuses on measurable learning outcomes and implementing play-focused curricula. (Smith, 2021; Theodotou, 2024; Torres-Begines et al., 2025). Smith (2021) argues that play-based curricula cannot be considered "curriculum" at all, as play, by its very nature, is open-ended, and the use of terms such as "quality" and "performance" to describe play, as applied by policy directives in an attempt to measure its effectiveness, is contrary to the autonomous, free-flowing nature of play. This is likely to cause confusion and anxiety for educators, administrators, families, and children as they feel pressure to focus on "school readiness." Furthermore, most empirical research on literacy development overlooks early childhood and focuses on primary grades (Smith, 2021). Facing policy directives that contradict and confuse theories and pedagogical practices of learning and human development, and that disconnect play from literacy learning (Smith, 2021), early childhood educators must position themselves as strong advocates for children's rights.

The studies reviewed for this paper highlighted the teacher's crucial role in extracting meaning and evidence from children's developing literacy skills, and pointed to the need for educators to become active researchers in their work with children. The early childhood educator's role as an up-close, playful, compassionate, researcher of children's work and play, who collaborates, listens, observes, interprets, theorizes, plans, designs curriculum, documents, scaffolds explorations and skill development, makes learning visible, upholds the rights of the child, and communicates with and involves families and community partners was the key to finding means to support children's developing literacy and numeracy skills (Boardman, 2022; Edwards et al., 2022; Henningsen, 2013; Inan, 2021; Smith, 2021). Teachers can support children’s developing literacy in play, as well as their voices and rights, by “amplifying the gestures

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and words of the child" and "sharing this with other children" (Chieli, 2025). Smith (2021) encourages educators to lean into children's integrative modalities with "close observation of the multimodal movement of play" by "focusing on the fine details" to "explore these moving and often unexplored aspects of literacy" and to synthesize and seek deeper meaning (p.154-155). The studies all point to the importance of keen observation, documentation, and interpretive skills in order to make meaning and learning visible.

Smith (2021) suggests that ECE teachers are also in a unique position, given the age of the children and the contexts in which they work, to self-create a values-based approach to literacy development, share it professionally, and leverage policy change through their own practitioner research. Henningsen (2013) describes the teacher's role as an active, up-close participant in knowledge-making and as a designer of curriculum based on children's emerging work, rather than a traditional or prescribed curriculum. Based on Henningson's (2013) and Smith's (2021) observations, the early childhood educator is better described as a teacher/researcher/activist. Indeed, a fundamental aspect of the educational philosophy of Reggio Emilia schools is their interpretivist approach to co-creating knowledge and meaning (Inan, 2021). Hence, we can see the importance of access to conferences where educators can share their work and learn from other practitioners/researchers, potentially advancing the ECE profession and filling gaps in research. A more robust ECE profession does not require a more academic curriculum for young children. Instead, it means that adults have the responsibility to recognize the uniqueness and importance of early childhood learning and to actively support, engage in, and protect those early years.

Conclusions

The idea of "teacher as researcher" has become a major focus of my workplace professional development. We have collectively continued this study of early literacy by co-constructing knowledge through examining our practices and documentation, consulting external resources, and participating in hands-on learning opportunities. I continue to research how play in early childhood builds reading and writing skills, and specifically, how the latest findings can be appropriately applied to early childhood

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literacy development in ways that protect play and early childhood from academic pushdown. We aim to fill the research gap with our own findings. We must continually align our values and practices with theory to support young children's learning and rights. However, we must be wary of complacency and not be afraid to challenge dominant powers, or to become overly reliant on research while ignoring the evidence before our own eyes.

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Children's Right to Play: Nurturing Social-Emotional Learning (SEL) Through Play in Early Childhood

Lin Moore, PhD, Texas Woman's University & Elaine Zweig, PhD, Educational Consulting

Introduction

The recent focus on the critical value of social-emotional learning for young children requires a re-examination of the role of play in supporting whole-child development (OECD, 2021; The Lego Foundation, 2018). Social competencies are a set of social, emotional, and cognitive skills that allow children to interact successfully with peers and adults (Ecological Approaches to Social Emotional Learning Laboratory, 2024; Schmidt, 2019). The prefrontal cortex manages these skills and takes time to learn and apply appropriately across various settings (Bergen, 2007; Springer, 2020). Early childhood educators, parents, and caregivers, as caring adults, are uniquely positioned to provide opportunities for children to acquire and practice social competences through playful learning.

The Issues: Social and Emotional Learning (SEL)

Social skills and how to manage one's emotions do not develop automatically. Young children listen to and watch the adults and family members around them. They learn how to handle various situations by imitating others. However, the behaviors and emotional responses they acquire through modeling may be inappropriate or socially unacceptable. Children exposed to name-calling, yelling, and hitting will likely use these same strategies to get their needs met.

Direct teaching of social skills may also be ineffective. Telling a child, "Be nice to your friends," does not specify how to maintain authentic, reciprocal relationships with peers. Similarly, telling a young child, "Don't cry; you're fine," does not acknowledge the physical pain or emotional hurt that the child may be feeling. These types of statements lead us to ask how best to support young children's social competencies and emotional well-being. Is play an essential pathway for SEL?

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The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2024) defined social and emotional learning as "the process by which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, mange emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions." Furthermore, five primary competencies are central to social and emotional learning: **Self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.**

Background

Children's Play and Social Competencies

Examining how children's play promotes the development and maintenance of social competencies can lead to positive change. While there are multiple definitions of play, researchers and experts generally agree that play is active engagement in activities that are "fun," which impart feelings of pleasure and joy (Brown & Vaughan, 2009). Play is voluntary, self-chosen, and self-directed, intrinsically motivated, creative, and imaginative (Gray, 2023). Curiosity is the force that drives play and meaningful learning (Schmidt, 2019). Playful learning encompasses free play, guided play, and games with rules (Zosh et al., 2018). Early childhood educators, parents, and caregivers determine the environments, materials, and timeframes in which children are allowed to initiate, explore, and lose themselves in play. Different types of play afford specific opportunities for children to develop the five competencies identified by CASEL.

Sensory play involves bins filled with kinetic sand, rice, beans, or pasta; water play; finger painting and painting with feet; light tables and shadow boxes; scent or taste explorations; and making slime or playdough. Through sensory play, children become **self-aware**, notice likes and dislikes, and build self-confidence in their ability to discover and take control of their immediate environment.

Physical play includes dancing, jumping, and hopping to music; yoga and other exercises; chasing and circle games, obstacle courses, and relay races; balls, balloons, and Frisbees; and parachute activities. Successful play requires **self-management** of one's own body and one's emotions. Children define and work toward goals, handle

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stress, persevere to overcome challenges, participate in cooperative and competitive activities, and learn to express feelings appropriately.

Social awareness focuses on recognizing and valuing individual and group similarities and differences, as well as empathizing with others. **Imaginative play** offers children opportunities to experience multiple perspectives and develop empathy through make-believe and storytelling with puppets, dolls, stuffed animals, and action figures. Enactments of dramatic play with props and costumes allow children to role-play both real and imagined situations that require social interactions and negotiations. Board games, card games, call-and-response games, and guessing games are **games with rules** that necessitate social interactions and turn-taking with play partners. Children learn persistence when games are challenging, and recognize the value of fairness when playing with others.

Construction play involves building with blocks and accessories, designing roads and ramps for cars, trains, marbles, or balls, and creating structures with loose parts, Legos, Duplos, Tinker Toys, and Magna-Tiles. Although construction play may be solitary, it more often requires **relationship skills** to plan, implement, and deconstruct or destroy the desired products. Establishing and maintaining friendships, while managing interpersonal conflicts, are critical components of healthy relationships. Children learn to invite others to play, ask for help when needed, and share ideas and resources cooperatively.

Responsible decision-making involves considering relevant factors, anticipating potential outcomes, and acting with respect for others. **Exploratory, nature, and creative arts** provide avenues for responsible decision-making. Examples of **exploratory play** include investigating how things work, conducting simple science experiments, exploring cause-and-effect with objects, solving puzzles, and engaging in scavenger hunts. **Nature play** focuses on observing birds, insects, and other wildlife; collecting and classifying samples of leaves, rocks, and other natural objects; digging in dirt and mud; and caring for plants. **Creative arts play** involves drawing, painting, sculpting, and printmaking with various media to produce designs, collages, murals, mosaics, 2-dimensional, and 3-dimensional artworks. In addition,

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creative arts play includes creating and using musical instruments and sound makers, singing songs and fingerplays, writing and illustrating stories and poems, and making self-authored books.

Special Considerations

Although play is universal, the materials and context of play should take into account children's cultural, linguistic, and socioeconomic contexts (Bressan & King, 2022). For example, selecting multicultural and bilingual books, stories, and songs helps children feel a sense of belonging within a supportive community of learners. Dramatic play props and costumes that reflect the children's cultural and family backgrounds allow meaningful role-playing with familiar objects and settings. Games derived from community and cultural traditions support the languages and ethnic identities of the children involved.

As early childhood educators, parents, and caregivers create inviting environments, select materials, and allow for extended periods of children's play, they should also consider the level of adult intervention or direction. Free play is child-chosen and child-directed, within safe parameters. Adults provide space, time, and materials while leaving the decision-making to children. Sensory play and creative arts play are often settings for free play. Guided play focuses on specific learning goals that require some adult guidance or supervision. Exploratory play, such as science experiments and nature play, such as caring for plants, and digital play, such as coding and programming, are examples of guided play. Games are excellent settings for children to practice social awareness and relationship skills, as well as self-management and responsible decision-making. Adults may introduce the basic rules of gameplay, but allow children to negotiate turn-taking, rule adjustments, and conflict resolution. It is important to acknowledge that social and emotional learning and the various types of play occur within relationships (National Scientific Council on the Developing Child, 2004). Nurturing adults provide a climate that is emotionally warm and physically safe for each child, while encouraging risk-taking that is appropriate for the child's individual abilities, developmental age, and background. Friendships with peers will

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blossom in a learning community where every child is valued and feels a sense of belonging.

Recommendations

Is play an essential pathway to SEL? We can answer, "Yes!" when adequately supported by policies, procedures, and the stakeholders in Early Childhood Education. The following are some recommended components for success.

1. Agreement among stakeholders (educators, parents, caregivers, and policymakers) that play is a fundamental right of children and a foundation for development in the social, emotional, physical, and cognitive domains.
2. Preparation for preservice teachers and childcare workers that incorporates the acquisition and practice of skills to observe, assess, and support children's play.
3. Ongoing professional development for early childhood educators and caregivers to plan and implement environments (indoor and outdoor) and select materials that invite playful explorations.
4. Policies that provide large blocks of time for children to engage in meaningful child-initiated play activities in early childhood education and community programs.
5. Funding for equipment, materials, and supplies that adequately support various types of playful learning in programs for young children.

Conclusion

Children need joyful, playful learning to develop social competencies and emotional well-being. It is time for adults to stand up and advocate for children's right to play at home, in their communities, and in their school and educational settings.

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Is Risk the Reward? Toward an Emphasis on Risk-taking and Decision-Making in Play and Learning Spaces

Alissa Rupp, FAIA

Introduction

To thrive in an ever-changing world, children develop and improve their ability to adapt. Adapting successfully requires trying new things, preferably in a context where "failure" is survivable. The instinct to protect children from failure is strong, so adults often shield children from contexts perceived as risky. Yet this can limit children's opportunities to adapt or learn from bad decisions when the stakes are low (Vedantam, 2025), leaving them unprepared when the stakes are higher. Children's museums provide a unique environment where parents trust that children are safe, children encounter new challenges in a playful space, and adults and children alike learn how to respond to mistakes or failures (Rupp et al., 2023). With this in mind, museum professionals and others who are focused on learning through play must encourage children to assess—and take—risks.

This paper discusses how children's risk-taking and risk assessment relate to developing core competencies and resilience. The overarching mission of children's museums—encouraging learning through all types of play—may also set the stage for children to become better decision-makers and face challenges with confidence.

Problem Statement

Why Take Risks? In the simplest terms, we want our children to be happy, safe, and good at something. What we don't always discuss is that being happy, safe, and good at things takes practice. In every aspect of life, we have to try things out, learn, get better, mess up, and then try again. And all of that involves taking some amount of risk (Von Bank, 2022).

Risk is generally seen as something to mitigate or even avoid. But as adults, we know that taking risks is sometimes necessary. Since we were all teenagers once, we also know that "risky behavior" can often look more like "reckless behavior" to adults and can even lead to physical or emotional pain for the child or for others. While it is clearly

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our job as a society to get children to adulthood in one piece, that process can be hard to watch when we see children taking physical, social, or emotional risks and our protective instincts kick in. This paper will posit, however, that children are more likely to succeed on that path to adulthood if they learn to take risks and can then translate that learning into another skill: good decision-making. For children to develop decision-making skills, they need to navigate 1) risk competence- the ability to see a risky situation and make decisions about it- and 2) *risk competence*—the ability to see a risky situation and make decisions about it—and 2) *risk perception*—predicting the negative outcomes of that risky situation (Lavrysen et al., 2015).

If we dive deeper into what we want for our children, we will likely say we want them to *grow*—emotionally, physically, and intellectually—and to become *competent* in areas that align with their developmental milestones. And we might note that growth and developing competencies also carry some risk—think of learning to walk, learning to read aloud, or learning to drive. So, if we want children and youth to grow, then they (and we) may need to take some risks. They will need to try things, knowing full well that sometimes they will fail. "Children can only understand risk if they are allowed to experience it. . ." (Lange, 2018, p. 204).

Background

Growing into Risks. In ideal circumstances, children develop skills by taking calculated risks, preferably when the stakes are quite low, so they can reap the benefits when they succeed. This brings to mind a "steep learning curve", where the likelihood of failure goes down as competency rises, but the implications of failure may worsen as the task becomes more complex.

Competency will grow as people move their way up the learning curve, if they are also learning to:

- judge the risk of their actions, including the severity, the possible advantages of success, and the possible consequences of failure;
- assess their own skills and likelihood of success; make (informed) decisions;

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- and, importantly, be ok, or know where to turn, if they misjudge and the risk does not pay off or if it results in some hurt.

To activate the learning curve, we do not need to encourage children—or anyone—to take risks for risk's sake. We should encourage them, and each other, to take risks for growth's sake. This shows that risk-taking is essential because, as people develop skills or conquer fears, growth can require some extension—pushing themselves a bit outside their comfort zone and doing things badly until competency builds. Finally, they can feel the exhilaration of succeeding at something hard.

Appropriate Approaches/Strategies

With this pattern in mind, children's museum professionals increasingly welcome the opportunity to incorporate risk-taking into exhibit and program design. They see that, on the path to adulthood, children must:

Become (and feel) competent in many arenas. Consider activities like using tools, climbing things, having hard conversations, helping someone in distress, doing math, being alone, cooking dinner, taking the bus, or any number of other life skills. Using a whittling knife or a power tool is low-risk if you are taught well and build the skill appropriately. It is very risky if you are cavalier or distracted, or if you do not heed the safety procedures associated with that tool (Telly & Spiegler, 2011).

Become good decision makers. Decision-making is a skill. That means you have to learn to do it, and you will make some bad decisions along the way. Professor Grant Schofield of Auckland University of Technology worked with a school in New Zealand where the principal, frustrated by an over-regulated recess period, successfully eliminated all rules from the school playground except "don't kill each other." Professor Schofield quipped, "Let's start children recognizing and mitigating good and bad decisions when they are eight and in a tree, not when they are 21 and in a bar" (Dateline New Zealand, 2014).

Develop their sense of agency. This word, "agency," is used intentionally instead of "empowerment" because power is "generally over "over' someone or something else, whereas agency is self-contained and fosters confidence. If we are

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agents in our own lives—that is, if we know we can govern our time, space, and bodies—then we have a sense of our value and capabilities, and that sense builds over time (Rupp et al., 2023).

Develop resilience. Things do not always go as planned, sometimes because we make mistakes and sometimes because s*** happens. Children are at lower risk (of danger, harm, or breakdown) if they are supported in developing their own resilience (Von Bank, 2022). And communities can be resilient as well. In a resilient community, when an individual can't handle something, they know people around them are committed to helping them through it. If the community itself is challenged, a group of engaged, resilient individuals can see it through.

Children's museums and other places where children learn through play work hard to allow children to take risks without creating hazards (Graef, 2015). Children can decide to go to the top of a climber, perform in a play, balance on a log, or ask another child to share without risking serious bodily or emotional harm. Children and parents can work together over several visits or years toward readiness for a particular challenge. What is a quick hop for a 10-year-old may be a scramble for a 6-year-old and a no-go for a toddler, but as children grow, their ability to make that leap—and their confidence about doing so—will grow. The challenge in a children's museum is often encouraging parents to let the children assess the risk for themselves. Adults may want to discourage children from doing something hard or assist them to the point that the child no longer assesses risk as part of the play. Letting the child make the decision, even if it leads to failure or an acceptable amount of hurt or surprise, prepares that child for agency in the future. Like adults, children learn as much from what does NOT work as they do from what does (Holman & Denworth, 2025).

And let us be clear: this is *not* meant to imply that children need to "go it alone" or "toughen up" (even though plenty of GenX "latchkey children" will wax nostalgic about all the wacky, dangerous things they did in those unsupervised after-school hours). Taking risks does not mean letting someone hurt you. And no child should be pushed to perform in ways that are harmful to them, physically or emotionally. Instead, the goal is that when children face danger—and they will—they have tools in their

decision-making tool belts because they have experience managing challenges. We hope that the danger they face will be developmentally appropriate—that is, that children will not face adult-sized hazards, emotionally, physically, or intellectually. We hope they will not be in high-stakes situations that are not right for them. But how will they be ready for the inevitable challenges of adulthood if they have not met challenges as children? We do not suddenly become good decision-makers in adulthood, just like we do not suddenly become good drivers. When a 16-year-old finally gets behind the wheel, they have a lot of decisions to make, and a lot of risks to mitigate. Our roads will be safer if they practice decision-making and risk mitigation when they are young, so they are as good at it at sixteen as their partially developed frontal cortex will allow.

Conclusion/Recommendation

Risk is the Buzz Word; Growth is the Point. So, while there is a lot of buzz about risk, the idea posited here is that taking risks is not the point of the play, or of the learning. *Growth* is the point. Developing diverse competencies is the point. Risk should be mitigated, competency builds over time, and decision-making is the skill that bridges the two. We grow by assessing the results and consequences of our decisions (Keeler, 2020). But it is a process: when we see videos on social media of small children competently using a very sharp tool, or handily starting and using a cooking fire, or fluidly playing an instrument in front of hundreds of people, or expertly climbing a tall rock face, what we are seeing is actually a low-risk situation. We are seeing a situation where someone—probably an adult who cares about them—helped that child develop their skills, making the activity *less risky*. The younger person took on what they could and grew into the skill. At the point of the viral video, what the child could take on might indeed be high stakes; that is, something quite bad could happen. But if something is high-stakes, that is the best reason for it to be low-risk. That high-stakes situation is now within that child's capabilities because they feel competent, know their boundaries, make informed decisions in the moment, and will be resilient if things do not go as planned. And the children's community, we hope, will be there for them no matter the outcome.

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Work in this area with children and youth has significant societal implications. In his far-reaching discussion of gun violence in the United States, Jens Ludwig (2025) describes a range of dangerous situations faced by youth. Each emerged from a relatively short, intense interval in which one or more of the young people involved made a series of very bad decisions. When youth navigate stressful day-to-day conditions and then face a physical or emotional challenge they cannot manage or avoid, good decision-making (or "self-interruption") can prevent a disastrous outcome. However, if we combine such a situation with access to a firearm, the heat of the moment can easily result in a fatal decision before any cooler heads or helpful bystanders can prevail. In such a moment, the stakes are indeed very high; the risks are extreme, and the competencies required—diffusing a situation, calming oneself, resisting the urge to be drawn into rage—may not be readily at hand (Ludwig, 2025).

Children's museums, like many youth-centered organizations, help children grow by encouraging them to take calculated risks and expand their intellectual, physical, and emotional horizons. Exhibits and programs that include child-led, intergenerational play can build decision-making muscles, build physical strength, and support internal well-being. We can help children (and adults!) learn some of those life skills through play, friendship, and community. Let's keep helping all children assess and mitigate risks and make good decisions, even when the stakes are high, so they can do what we really want them to do: become happy, healthy, competent adults.

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Play, Spiritual Development, Spiritual Flourishing

Deborah Schein, PhD

Introduction

Understanding the relationship between play and Spirituality in early life is essential, as it informs the role of play in development. The concept of play resonates across all ages. However, questions remain regarding how infants engage in play, what they experience during play, and how play and spirituality interact. Most importantly, we need to consider why this relationship matters.

Problem Statement

Currently, play is not viewed as a biological necessity for healthy or spiritual development and flourishing. It is also not commonly seen as a way to foster kindness or empathy in children. The need for free and open play, along with the time and space required for children to form deep connections of love and self-awareness, has diminished. In the 21st century, adults responsible for children are bombarded by societal pressures such as fear, anxiety, depression, and the constant demands of community, personal, and professional life. This overwhelming array of responsibilities can lead adults to overlook the importance of play for children.

Even in the absence of heightened fear or anxiety among adults, the current climate of unrealistic academic expectations continues to restrict the time and space available for children to engage in self-directed play. This reduction in play contributes to the emergence of negative traits in contemporary interactions, including narcissism, unhappiness, deceit, anger, and hatred. Such qualities often arise when individuals have not received adequate spiritual nurturing. Consequently, we must reevaluate the meaning and purpose of play in relation to Spirituality, particularly from the perspective of young children's spiritual development and flourishing.

Archbishop Desmond Tutu and the Dalai Lama assert that individuals cannot experience joy when under stress. Desmond Tutu emphasizes hope, stating, "Now, hope is different in that it is based not on the ephemerality of feelings, but on the firm ground of conviction" (2016, p. 122). Maria Montessori highlights the importance of Spirituality

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in human development, stating, "It is time to accept the spiritual side of our humanness and to respect the child as capable of guiding the world to a radiant future" (Claremont, 1967, p. 4). Peter Gray (2014) contends, "if we want our offspring to have happy, productive and moral lives, we must allow more time for play, not less."

A critical reassessment of the meaning and purpose of play in relation to Spirituality is warranted.

Background

The concept of Spirituality often elicits discomfort. However, it warrants careful consideration rather than avoidance or alteration. Defining play within the context of Spirituality is essential to understanding how integrating these concepts can inform approaches to supporting both Spirituality and play.

Suzanne Axelsson, an early childhood pedagogical consultant from Stockholm University, offers this definition (2025): Play as ritual occurs when adults in a child's life are responsible for creating space for children to experience (a) freedom, (b) discovery, (c) wonder, (d) curiosity, (e) sensory input and output, (f) repetition and ritual, (g) games, (h) food, and (i) everyday moments (p. 27). This definition of play matters because it reminds parents and educators that they are responsible for giving young children space to experience play in all the ways listed above. In his 2025 Substack post, *Play Makes Us Human*, Peter Gray explains that play gives people time to experience and engage with fundamental qualities of life. For this paper, the definitions below show how the essential elements of Spirituality and play align.

Recognizing that play facilitates experiences of essential elements of Spirituality, such as wonder, joy, awe, and inner peace, may alleviate discomfort with the term and redirect attention toward giving children opportunities to engage with these qualities (adapted from Schein, 2012; Schein in Kirmani et al., 2023).

Essential Elements of Spirituality

- *Wonder:* Feelings of surprise triggered by beauty, the unexpected, the unfamiliar, or the mysterious, often found within everyday experiences (Glaveanu, 2020). Wonder is also a verb that reflects a desire or curiosity about something of

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interest, prompting one to reach out, touch, or do (Schein, 2017). Wonder often implies a desire or curiosity to know more about something, leading to pondering, puzzlement, or a big new question. All kinds of wonder abound in the lives of young children, as everything is new to them.

- *Awe:* Feeling of wonder with a touch of fear or disbelief (Schein, 2017). Keltner (2023) describes awe as human encounters with vast mysteries that are not yet understood. Research suggests that awe is partly about focusing on the world and discovering that it is filled with marvelous things that are not us (Sturm et al., 2020). Some studies are linking awe to empathy (Van Elk et al., 2019).
- *Joy:* Feelings of pleasure and happiness (Nodding, 2007). Nodding's behavioral research indicates that individuals who experience happiness tend to learn more effectively, exhibit less aggressive or harmful behavior, and show greater resilience in the face of adversity. Infants contribute joy through their presence, while nature fosters joy by facilitating a sense of connection to the earth.
- *Inner peace:* Feelings of inner calm, centeredness, and presence. Inner peace can lead to a flow state or the opposite of stress or anxiety (Dalai Lama et al., 2016). Inner peace appears innate in babies, as they naturally breathe from their bellies. This kind of breathing can be revisited later in life via mindfulness exercises (Langer, 2014).

Defining Spiritual Development and Spiritual Flourishing

- *Spiritual Development*: Follows a Piagetian view of stage development where the infant grows, matures, and progresses in a linear fashion; one stage at a time. In a Montessori classroom, the child's play is structured to incorporate these stages of development.
- *Spiritual Flourishing*: Follows Vygotsky's (1962) social constructivist theory, in which children grow, thrive, and prosper in social contexts with others and in and with nature.

In Reggio-inspired schools in the United States, children spend time engaged in play that often involves questions that lead to investigations that may span months. Both Spiritual Development and Spiritual Flourishing occur naturally in nature or forest

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schools. And in the end, human Spirituality requires both development and flourishing to last a lifetime.

Froebel created "gifts and occupations for children," such as wooden blocks and puzzles, so children could be "active and engaged in meaningful play at the very beginning of life" (Provenzo, 2009, p. 87). His first gift was a basket of primary-colored yarn balls. The balls invited infants to grasp, swing, roll, drop, and hide them, helping very young children learn concepts such as "here, there, over, right, left, larger, and smaller" (Provenzo, p. 89). Froebel's theory of play went beyond learning to include his desire for children to appreciate natural forms and harmonies found not only in objects (Provenzo, 2009, p. 86) but also in nature (Provenzo, 2009, p. 97). Froebel may have been one of the first to invite parents and educators to think more deeply about the inner workings, essence, and spiritual side of very young children in relation to play.

Froebel's words resonate with similar thoughts made by Stuart Brown, founder of the National Institute for Play. In a foreword written for *Playful Awakening: Releasing the gift of play in your life*, Brown explores the universal significance of play in the pursuit of happiness and authenticity across the lifespan and suggests that playfulness reconnects people to their truest selves (Gammage, 2012).

Montessori (1912) drew on the work of Édouard Séguin (a French physician and educator, 1812 - 1880), who sought to respect and understand each child while using sensorial materials for learning. Using the work of Seguin, Piaget, and other theorists as a springboard, Montessori developed a philosophy built around practical life activities, sensorial explorations, mathematics, literature, culture, geography, and nature. Montessori's classrooms were known for their unique, childlike-sized chairs and tables, their beauty, and the freedom they offered children within a prepared, stage-oriented environment. In this space, each child had time for self-chosen repetition and activity choice, reflecting each child's unique disposition. The materials were designed to be self-correcting for gentle guidance and clarity. In this way, children created their own paths for exploration, experiences, and discoveries within the Montessori classroom. Montessori viewed each child as competent and capable of guiding the world to a radiant future (Montessori as cited in Claremont, 1967).

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According to Montessori, a radiant future may depend on sustaining a spiritual perspective that integrates both spiritual development and flourishing. Although educators in the United States rarely use this terminology, Montessori offered a nuanced description of the spiritual dimension of play in early childhood, introducing the metaphor of the spiritual embryo. The spiritual embryo is believed to contain the energy or horme, a Greek term for "vital force" (Montessori as cited in Carter, 1963, p. 15). This *horme* signifies the intrinsic motivation that guides individuals toward growth, independence, knowledge, and learning (Montessori as cited in Claremont, 1967). This internal drive enables children to acquire skills such as walking, speaking, playing, and assimilating cultural practices (Montessori as cited in Gardner et al., 2001). Montessori's reference to play as children's work should be viewed as a process of self-creation that culminates in adults capable of fostering a peaceful and compassionate society.

Montessori asserted that the spiritual embryo, an innate and intangible force, is activated by love (Montessori as cited in Claremont, 1967). Specifically, this refers to the unconditional love that a parent or guardian extends to a child, which establishes a foundation of trust within the relationship (Schein, 2017, 2023). Experiencing such love fosters meaningful connections (Harris, 2007; Kirman, 2008). Educators may also demonstrate this form of love toward their students (Pestalozzi, 1898; Froebel, 1887, as cited in Best, 2016).

Spirituality and Relationships

To understand how love awakens the spiritual embryo, one can first turn to attachment theory, as posited by Bowlby & Ainsworth (as cited in Bretherton, 1992). Initially, it was observed that infants may feel love and eventually form an attachment to their mother because "the mother has satisfied the infants' primal needs" (Bowlby & Ainsworth, as cited in Bretherton, 1992, p. 767). Anyone who has watched an infant being fed, rocked, or sung to can attest that the infant's satisfaction is visible and palpable. But there is more: beyond this relationship, when one thinks about spiritual development, there is also the beginning of a developing sense of self. Without this inner awareness, it is difficult to imagine a radiant future. A sense of self-in-relationship to

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the world provides a foundation for trust, respect, openness, and hope, and it begins with a feeling of love.

In a healthy world, as babies are being cared for, it is not uncommon to see a baby staring intently into the smiling eyes of their parent or caregiver. The stare is so strong that it can appear unbreakable. The infant remains focused, present, and sometimes even in control of the movement of their head and eyes (Schein, 2017). The National Institute of Play, under "How We Play" (retrieved on 2/1/2026), called this attunement or harmony. The baby may think or feel, "Those eyes are looking at something and that something is me!" Simultaneously, the adult, who is sharing love with the baby, may also enjoy feelings of new life, hope, and joy simply by holding an infant in their arms and engaging in this stare. A spiritual awakening is taking place for both of them. The infant's focused engagement with the adult illustrates the significance of consistent, loving, and nurturing experiences.

Buber, a German-Jewish philosopher (1878-1965), offers the language of *I-It* and *I-Thou* to describe human relationships, another essential piece of the definition of Spirituality. He writes that every relationship is significant and meaningful, and describes how infants enter the world not yet really knowing themselves but sensing all (Buber, 1923, as cited in Kaufman, 1970). Over time, each relationship informs each child more about the world and more about themselves. Buber describes *I-Thou* relationships as a deep connectedness with the entire world, including the living and the nonliving, the natural, and other concrete objects (Buber, 1923, as cited in Kaufman,

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1970). Because of this, an "*It*" (such as objects referenced by Froebel) and other types of relationships immediately become an "I/Thou" relationship as soon as a child engages with an "*It"*. For instance, when a baby holds an *"It"* such as a rattle, shakes *it,* and mouths *it,* the "*It "* becomes a *"Thou"* and is immediately imbued with importance and meaning (Schein, 2017, 2023). Every *Thou* relationship is meaningfully present, honored, and important. Buber suggests that this is how a child integrates new understandings into their being (Buber, 1923, as cited in Kaufman, 1970, pp. 54-64), much as a child integrates a new schema into their mental awareness of the world (Piaget, 1954).

Buber discusses what happens internally in all humans when they experience I-Thou moments in nature or elsewhere. He suggests that the word *Thou* has no religious connotations (Buber, 1923, as cited in Kaufmann, 1970, p. 59). Instead, the word *Thou* reflects a *You-Spirit*, where the spirit simply exists between the *I* and *You* in an inner state described by Buber as "the air we breathe" (Buber, 1923, as cited in Kaufmann, 1970, p. 89). In this way, the words "*air"* and "*breath"* become synonymous with "*spirit"* and "*soul"*. The question remains: What fills that spirit or soul? Might it be wonder, awe, joy, and inner peace?

These same spiritual elements are often seen when children spend time in nature. In her book, *Nature and Spirituality During the Early Years,* Wilson (2026, p. 4) describes the connection between nature and humans. Numerous studies support these connections and highlight long-term benefits for children. Drawing on this body of research and her own experiences as an early childhood educator and scholar,

Wilson (2026) defines the kind of play that nature provides for children and its benefits. Natural environments and natural materials come richly endowed with play potential. They invite 'authentic play, which is the best kind of play for young children. Authentic play is open-ended and freely chosen. The rewards of nature play are intrinsic—no trophies, no winners and losers, no conforming to human-made rules—just joy, personal satisfaction, discovery, excitement, and a sense of efficacy.

A conversation about how ***significant relationships*** help children develop spiritually would not be complete without mentioning the term biophilia. A child's

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rapport with nature provides an exceptional relationship, known as biophilia. Wilson defines biophilia as people's love for and connection to the earth (Wilson, 1984, as cited in Ruth Wilson, 2026). The definition of biophilia also describes how humans are drawn to nature and how scientists have defined this yearning as an "innate tendency to affiliate with life and lifelike processes" (Ruth Wilson, 2026, p. 63).

As part of this relationship, young children must learn to care for and respect the earth with reverence and a sense of spiritual sacredness (White, 2011, as cited in Wilson, 2026). This relationship must begin early in life to ensure that children learn that nature is something we are all part of, not something to be used and controlled (Wilson, 2026). Ultimately, "nature play is a source of comfort, a place of discovery and delight, and a habitat where [children] can be their most authentic selves" (Wilson, 2026, p. 8). Everything outside of the child continues to inform the child's inner self and sense of who they are, sometimes referred to as "ecological consciousness" (White, 2011, as cited in Wilson, 2026). "Young children manifest ecological awareness when they engage with nature in caring, respectful, and reverential ways" (White, 2011, as cited in Wilson, 2026, p. 104).

Froebel (1887) recommended that children spend much of each day outdoors playing with tools, planting, making observations, and exploring their immediate environment (as cited in Best, 2016). He suggested that adults in a child's life should walk alongside the child. This is especially true for very young children (Holman & Schein, 2025).

Both Spiritual Development and Spiritual Flourishing occur naturally in nature or forest schools. Ultimately, human Spirituality requires both development and flourishing to last a lifetime.

What does it mean that nature play promotes the spiritual development of young children? To answer this and other questions about Spirituality, the following definition of Spirituality will be used. It comes from findings of a research study conducted by Schein (2017). *Early Childhood Educators' Perceptions of Spiritual Development in Young Children: A Social Constructivist Grounded Theory Study* (Schein, 2012). Over the past several years, this definition has evolved (Schein, 2017; Schein as cited in

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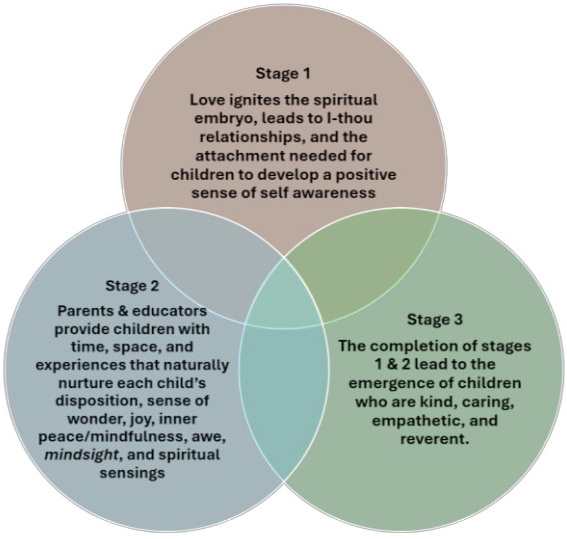
Kirmani et al., 2023; Holman & Schein, 2024, 2025). The definition of Spirituality maintains a non-religious view of young children's spiritual development, which begins with three stages and eventually becomes a working system.

- Stage 1: Describes how love ignites the spiritual embryo that leads to I-thou relationships and attachment needed for children to develop a positive sense of self-awareness. This is not ego or self-esteem, but rather awareness of self in relationship to self, others, and the earth.
- Stage 2: Describes how children move out into the world and how parents and educators provide children with time, space, and experiences (spiritual moments) that naturally nurture each child's disposition. A disposition is a child's unique character, nature, temperament, and passions. This is how the essential elements of wonder, awe, joy, and inner peace enter a child's life, as each child individually responds in their own way to different explorations, experiences, environments, and relationships.
- Stage 3: Describes how exposure to and experiences with qualities found in stages 1 & 2 can lead to the emergence of children who are kind, caring, empathetic, and reverent. At this point, spiritual development becomes a system, and spiritual flourishing is required to sustain a spiritual self (Schein, as cited in Kirmani et al., 2023).



Three Stages of Spiritual Development in Infants. (Schein 2017).

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Having established how Spirituality and play intersect to foster desirable human qualities in children, it is important to consider strategies for integrating spiritual elements into daily classroom routines. These approaches aim to prompt the early childhood education field to reconsider the significant contributions of both play and Spirituality in nurturing kindness and open-mindedness. Key questions include how best to support spiritual development and what insights can be drawn from leading educators past and present.

Strategies within the Context of Spiritual Sensing and Play

Humans, including very young children, require diverse experiences to foster vitality and develop sound decision-making abilities (Eaude, 2009). Research by Kirmani, M. and Kirmani, S. (2009, 2013) demonstrates that both adults and children encounter senso-centric Spirituality through the senses of sound, sight, touch, taste, and fragrance, which can facilitate deeper spiritual awareness. Younger, a Scottish researcher, defined *spiritual sensing* as an invitation to experience intentional ambiguity and flexibility among the physical senses (touch, taste, sight, sound, scent), the affective realm (feelings, inklings, and intuitions), and values and principles (Younger, 2021). The following adaptations of Younger's sensings apply to this discussion.

Sensing meaningfulness arises when children investigate the function of an object, such as a loose part (a recycled item), a toy, or a natural element like a pinecone or stick. In play, the object takes on significance, shaping the child's sense of self and understanding of the world.

Sensing mystery encompasses experiences of wonder, joy, awe, and inner peace, which may prompt children to ask questions and reflect. Mystery-sensing can also occur when children use their imaginations in response to fear or the incomprehensible (Hay and Nye, 2006, as cited in Mata, 2011). This form of sensing closely aligns with the experience of awe.

Sensing values during play may emerge as children pursue kindness, fairness, honesty, and respect, particularly when they independently structure play with peers. Increased adult intervention can limit opportunities for children to perceive and

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internalize others' values. Additionally, when educators or family members dedicate time to acknowledge children's feelings during moments of spiritual awareness, they support the integration of cognition with emotional and spiritual development. For instance, during a class walk in the woods, if a child pauses to observe a falling leaf, the teacher can join the child in recognizing a potential spiritual experience. Once the teacher acknowledges value sensing, children can often continue their activities.

Sensing challenge, or provocation, prompts a child to pause and reflect. Through personal experiences with love, beauty, goodness, joy, empathy, and compassion, children can subsequently progress (Younger, 2021, adapted by Schein).

Awareness sensing involves self-awareness and the understanding of one's own thought processes. Although it was previously believed that conscious awareness does not occur in very young children, recent brain research indicates that even without conscious recall, experiences can significantly influence self-awareness, metacognition, *mindsight* (Siegel, 2010), and potentially spiritual development and flourishing (Francken et al., 2022). Play effectively strengthens awareness sensing.

These forms of sensing may contribute to the development of executive functioning and self-regulation in children. Peter Gray's extensive research on play highlights its role in fostering executive function, particularly self-directed control, which leads to greater happiness, self-reliance, and academic success (2013). In addition to these sensings, the concept of risky play may also serve as a valuable form of sensing.

Risky sensing entails approaching the limits of one's abilities, which can foster growth and new achievements (Keeler, 2020). This form of sensing lets children test their stamina, strength, perception, and problem-solving skills, especially through movement, exploration, imagination, and creativity. Engaging in risky sensing also supports the development of self-awareness and self-regulation. Recognizing personal capabilities is essential before taking risks, and doing so can empower individuals to navigate the challenges and opportunities of an uncertain and evolving world.

Froebel, an 18th-century German progressive educator recognized as the father of kindergarten, defined play as "the highest expression of human development in childhood for it alone is the free expression of what is in a child's soul" (Froebel Trust,

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n.d., para 1). He also emphasized the connection between Spirituality and play in nature, stating, "When children play, there exists a unity of nature, spirit, community, and an unfolding of the life of each child" (Froebel Trust, 2025).

Conclusion

Parents and educators model spirituality and create environments where children can experience their own joys. This approach involves being present with children without interrupting, overshadowing, or directing their actions, observations, or inquiries. The emphasis is on sharing in children's self-discovered moments. Adults are also responsible for providing environments, materials, and tools that support children's spiritual exploration and interactions. Achieving this requires a deep understanding of each child's disposition and what resonates with them (Holman & Schein, 2024). Furthermore, adults model spirituality by experiencing and sharing their own moments of wonder, awe, joy, and inner peace with children and others.

This perspective parallels Montessori's concept of the *absorbent mind,* wherein children rapidly and effortlessly assimilate experiences from their environment. Through this process, children construct their identities (Montessori, 1949, as cited in Claremont, 1967). From birth, children can absorb information from their surroundings (Prowant, 2023). Children are not simply undeveloped adults; they possess unique skills and intrinsic abilities that warrant acknowledgment and respect.

Contemporary neurological research demonstrates that young children can perceive and recall minute details due to the active role of dendrites in processing new information from both immediate experiences and the environment (Carlson, 2006; Gopnik et al., 2001; NAEYC, 2005; Shonkoff & Phillips, 2000; Siegel & Hartzell, 2003; Vygotsky, 1962). Research in Spirituality further supports these neurological findings, indicating that all humans possess an innate spiritual self from birth, which must be recognized and nurtured throughout life to enable flourishing (Miller, 2021).

Parents and educators should consider these findings, as they shape the experiences and environments that foster meaningful spiritual moments and opportunities for play. It is important to reflect on what children are actually absorbing from their surroundings. In the digital age, with increased technology use among young

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children, parents and teachers should critically evaluate the value and relevance of screen-based learning for children's spiritual development.

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How Reggio-Inspired Teachers Enact Playful Learning: Characteristics of the Reggio Emilia Philosophy in Practice

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Introduction

The Reggio Emilia approach is an educational philosophy that originated in the city of Reggio Emilia, Italy. Developed by Loris Malaguzzi and described as "a philosophical approach focused on listening and respecting children and their potential by witnessing their actions towards reformulating everyday practices, ideas and projects" (Santín & Torruella, 2017, p. 50). The first Reggio school, established in 1963, placed great emphasis on nurturing relationships between adults and children while fostering environments rich in opportunities for play, exploration, and discovery. Santín and Torruella (2017) note that arts education models in Reggio schools support self-expression, communication, and critical thinking—often expressed through playful interaction. In contrast to more rigid early childhood programs, the Reggio philosophy views the child as an artist, scientist, and active participant, without limiting creative or playful processes.

The philosophy, guided by eight core tenets, the philosophy integrates child-led play.

1. **The Environment as the Third Teacher** – Spaces are intentionally designed to invite playful exploration, experimentation, and creativity, allowing the environment itself to partner with play-based learning.
2. **100 Languages of Children** – Children communicate and make meaning through many forms of play: dramatic play, building, drawing, dance, music, storytelling, and scientific exploration.
3. **Long-Term Projects** – Often emerging from children's play interests, these projects allow extended engagement in imaginative narratives, problem-solving, and collaborative construction.
4. **Teacher-Researcher** – Teachers observe and participate in children's play to better understand their thinking, interests, and learning processes, using play as a key context for inquiry.

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5. **Image of the Child** – Children are viewed as capable, curious, and resourceful, with play seen as a powerful medium for demonstrating competence and agency.
6. **Negotiated Learning** – Learning goals and play themes are co-constructed between children and adults, allowing for shared ownership and direction of the play experience.
7. **Documentation** – Photographs, transcripts, and artifacts of children's play are collected and displayed, making learning through play visible to children, educators, and families.
8. **Social Relations** – Play is recognized as a social act that builds relationships and shared understanding among children, families, and educators.

Together, these tenets position play not as a separate activity but as the foundation of learning in Reggio-inspired environments. By integrating play into all aspects of curriculum and interaction, the approach affirms both developmental research and Article 31 of the United Nations Convention on the Rights of the Child, which asserts that every child has the right to rest, leisure, and play.

Background

A literature review indicates widespread adoption of the Reggio-inspired approach in early childhood settings beyond the preschools of Reggio Emilia, Italy. Researchers are interested in how Reggio-inspired teachers' perspectives align with or contradict the literature. The study used the existing literature from Santín and Torruella (2017) to gather information from teachers who self-identified as adhering to a Reggio-inspired philosophical approach to teaching young children. Specifically, the present study sought to determine how participants incorporated Santín and Torruella's (2017) framework into their classrooms.

Problem Statement

How Reggio-Inspired Teachers Enact Playful Learning:

Characteristics of the Reggio Emilia Philosophy in Practice

The study aimed to identify characteristics of the Reggio Emilia philosophy as determined by teachers who follow this approach in their practice. While eight core

tenets (Santin & Torruella, 2017) define the Reggio-inspired approach, these concepts may not always be visible in the materials, interactions, and play opportunities found in early childhood classrooms. This approach aligns closely with the principles outlined in Article 31 of the United Nations Convention on the Rights of the Child, which recognizes play as a fundamental right for every child. In Reggio-inspired classrooms, play is not separate from learning; instead, play and learning are the primary ways children explore, experiment, and make meaning of the world. Because no formal means or standards exist to evaluate how closely a classroom or school aligns with this philosophy, the designation of "Reggio-inspired" remains open to individual interpretation.

Davies et al. (2012) found that children immersed in creative learning environments, a key component of the Reggio Emilia philosophy, experience a positive influence on their "academic achievement; increased confidence and resilience; enhanced motivation and engagement; development of social, emotional and thinking skills; and improved school attendance" (p. 88). However, children cannot benefit from these rich advantages if their teacher does not provide an authentic Reggio-inspired classroom setting.

Currently, no school accreditation or teacher certification program in the United States is associated with the Reggio-inspired approach. The study collected data to establish distinct characteristics that practicing teachers associate with the Reggio Emilia philosophy. Educators seeking to implement the Reggio approach in their own practice can use these findings. Furthermore, the results may inform researchers in developing Reggio-inspired training or classroom assessment tools for formal use.

Strategies

Research Design

A qualitative research approach was adopted to gain insight into the everyday practices of Reggio-inspired educators. As Starman (2013) states, qualitative research "is characterized by an interpretive paradigm, which emphasizes subjective experiences and the meanings they have for an individual" (p. 30). The *case study*, one of several qualitative research approaches, was deemed the most appropriate. A case study is

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defined as "a method of obtaining a 'case' or a number of 'cases' through an empirical examination of a real-world phenomenon within its naturally occurring context, without directly manipulating either the phenomenon or the context" (Kaarbo & Beasley, 1999, p. 372). Within the case study approach, researchers can choose from several methods based on the research goal. Exploratory case studies offer opportunities to gain a deeper understanding of the phenomenon under investigation through the subjects' perspectives. The goal of the exploratory case study is to "provide a cogent, detailed portrait of the phenomenon – the attributes it assumes, the variations it displays, the ways it appears to operate, and the combinations of factors that seem to shape the patterns observed in natural settings" (Ogawa & Malen, 1991, p. 274). The researchers determined that a qualitative, exploratory case study was the most appropriate approach to understand what the Reggio Emilia approach looks like in practice. A literature review identified a need to further explore what it means to be a Reggio-inspired educator.

The researcher sought to identify potential participants by gathering information from those who self-identified as embracing a Reggio Emilia-inspired approach to educating young children. The researcher used the social media platform Facebook for special-interest groups. The researcher identified four groups that both focus on Reggio-inspired approaches and are currently teaching. These groups included *Reggio Inspired Early Childhood Educators* (created in 2017; 60.8K members), *Reggio Emilia Inspired Resources* (created in 2017; 17.4K members)*, Inspired by the Reggio Emilia Approach* (created in 2019; 47.1K members), and *Reggio-Inspired Startup* (created in 2015; 9.5K members). As these Facebook groups were not associated with specific regions, the researchers assumed that the members represented a global population. The study participants did not include Reggio parent groups, as these groups would not be implementing the Reggio Tenets.

Sampling Procedures

The Reggio Classroom Assessment Measure (R-CAM), an author-created tool, was distributed via Facebook to the four identified Reggio Emilia teacher educator

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groups. The Facebook post invited participants to complete a Qualtrics questionnaire and enter a drawing for a set of blocks for their class.

> We are seeking input from practicing teachers who work in Reggio-inspired classrooms or programs. We are developing a tool to share with educators interested in implementing a Reggio-inspired approach but unsure how to begin.
>
> Please take a look at the chart below and note which materials, artifacts, and teacher facilitation support each of the core tenets of the Reggio approach in your center (i.e., if someone came and observed in your classroom, what would they see that demonstrates your adherence to the Reggio-inspired approach?).
>
> Responses are entered anonymously into a database; there are no known risks to participating in this study.
>
> To participate, click here:
> https://lsu.qualtrics.com/jfe/form/SV_9nU08m9MFEGqt13
>
> Participants will be entered into a drawing for a 72-piece Wood Castle Block set. Follow the instructions at the end of the questionnaire to register.

This study used criterion sampling. Criterion sampling involves the researcher "choosing settings, groups, and/or individuals because they represent one or more criteria" (Collins et al., 2007, p. 272). To be eligible to participate in this study, participants had to be teachers who self-identified as following a Reggio-inspired approach and be members of one of the identified Reggio Emilia Facebook groups.

Participants

This case study accessed Facebook groups associated with the Reggio Emilia approach. A total of 79 educators participated in the online questionnaire. 75 of those participants consented to have their responses used in this study. For each demographic questionnaire item, 51 (68%) participants responded. According to the data collected, most questionnaire participants were female (92.16%), had earned a master's degree (37.25%), had taught for over 10 years (64.71%), and had adopted the Reggio Emilia

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approach between 2010 and 2015 (37.25%). See Tables 1-4 for complete demographic information.

Demographic information on participants' gender, years of teaching experience, education, and years of implementing the Reggio-inspired approach in the classroom.

Table 1

Gender	Number	%
Female	47	92.16
Male	2	3.92
Non-binary/third gender	1	1.96
Prefer not to say	1	1.96

Table 2

Years of Teaching Experience	Number	%
Less than 3 years	3	5.88
3-5 years	3	5.88
5-10 years	12	23.53
More than 10 years	33	64.71

Table 3

Education	Number	%
High School or GED	1	1.96
Early Childhood Certificate or CDA	10	19.61
Associate degree	2	3.92
Bachelor’s Degree	16	31.37
Master's Degree	19	37.25
PhD	3	5.88

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Table 4

Year the Reggio-inspired approach was adopted.	Number	%
Before 2000	5	9.80
2000-2005	2	3.92
2005-2010	12	23.53

Analysis Plan

The researchers used two coding methods to interpret participants' responses to the self-report questionnaires and analyze the data. Auerbach and Silverstein (2003) describe coding as "a procedure for organizing the text of the transcripts and discovering patterns within that organizational structure" (p. 31). The researchers examined each participant's responses and assigned keywords and phrases. They performed this descriptive labeling line by line for each survey response. This coding procedure aimed to identify recurring ideas among participants. Open coding was used to interpret the participants' responses to the questionnaire item, "In your own words, please describe the Reggio-inspired approach." Open coding is "a method of generating a participant-generated 'theory' from the data" (Blair, 2015, p. 17). Because this questionnaire item was open to participants' interpretation, open coding was the appropriate data analysis technique. Once all survey responses were coded, the researchers analyzed and organized the codes into code concepts based on their connections. The researchers used code concepts to identify the overarching themes in the data. Themes were defined as "an implicit topic that organizes a group of repeating ideas" (p. 38). The identified themes represented the perspectives and experiences of the participating educators.

Results

Teacher Descriptions of the Reggio Emilia Approach

This study aimed to understand what the Reggio Emilia-inspired approach looks like in practice. To gauge teachers' understanding of the philosophy, participants were asked, "In your own words, please describe the Reggio-inspired approach." Of the 75 consenting participants, 33 (44%) responded to this questionnaire item. We used open

coding (Blair, 2015) to analyze participants' responses. Tables 5-11 present the themes, code concepts, codes, and code instances for this questionnaire item.

Tables 5-11.

Reggio-inspired approach themes, code concepts, codes, and code instances.

Table 5 Theme: Child-Centered

Code Concepts	Codes	Code Instances
Child-centered, Respect, Support	Child interests	12
Child-centered, Respect, Support	Respect for child	8
Child-centered, Respect, Support	Support for child	6
Competent Child	Child is competent/capable	14

Table 6 Theme: Learning from the Environment

Code Concepts	Codes	Code Instances
Natural, Environment, Learning from Environment	Environment as the third teacher	9
Natural, Environment, Learning from Environment	Natural Environment	7

Table 7 Theme: Documentation

Code Concepts	Codes	Code Instances
Documentation, Reflection	Documentation	7
Documentation, Reflection	Reflection	3

Table 8 Theme: Inquiry

Code Concepts	Codes	Code Instances
Inquiry, Exploration, Investigation	Inquiry/Inquiry-based	5
Inquiry, Exploration, Investigation	Explore and experiment	4

Table 9 Theme: Observation

Code Concepts	Codes	Code Instances
Observation, Teacher Researcher	Observation	6
Observation, Teacher Researcher	Teacher-researcher	3

Table 10 Theme: Collaboration

Code Concepts	Codes	Code Instances
Peer Collaboration, Social Skills, Communication	Learning with others	6
Peer Collaboration, Social Skills, Communication	Communication	2

Table 11 Theme: Community

Code Concepts	Codes	Code Instances
Community, Collaboration with Families	Community Involvement	3
Community, Collaboration with Families	Cooperation among teacher, child, and family	3

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Seven themes emerged from the participants' responses to this questionnaire item. After coding the responses, the code ‘child interests' was noted 12 times, ‘respect for child' 8 times, and ‘support for child' 6 times. Codes were grouped into the code concepts 'Child-centered', 'Respect', and 'Support'. The code ‘child is competent/capable’ occurred 14 times in the coded data. The code concept identified from these codes was ‘Competent Child'. Based on these similarities, these code concepts were combined to determine the overarching theme: *Child-centered*.

The code ‘environment as the third teacher’ was recorded 9 times, and the code ‘natural environment’ occurred 7 times in the coded data. The code concepts derived from these codes were 'Natural ' and 'Learning from the Environment'. The code concepts were generalized into the theme *Learning from the environment*.

The third theme identified was *Documentation*. Seven instances of the code ‘documentation’ were noted, and three instances of the code ‘reflection’ were noted. These codes also represent the determined code concepts.

Five instances of the code ‘inquiry/inquiry-based’ and four instances of the code ‘explore and experiment’ were identified. These codes were combined into the code concepts 'Inquiry', 'Exploration', and Investigation', which together formed the greater theme of *Inquiry*.

The code 'observation' was noted six times, and the code 'teacher-researcher' was noted three times. The code concepts classified under these codes are 'Observation' and 'Teacher-Researcher', which led to the overarching theme ‘Observation'.

Six instances of code learning with others and two instances of code ‘communication’ were recorded. From these codes, the code concepts 'Peer Collaboration', 'Social Skills', and 'Communication' were identified. These concepts were condensed into the theme *Collaboration*.

The code ‘community involvement’ and code ‘cooperation among teacher, child, and family’ were noted three times each. These codes were grouped into the code concepts 'Community' and 'Collaboration with Families', which determined the larger theme of *Community*.

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Across all themes, participants' descriptions underscored that play was not an "extra" or separate activity but a primary mode of learning in Reggio-inspired classrooms. Play served as both a process and a context in which children explored ideas, practiced skills, and constructed meaning in collaboration with peers, teachers, and their environment.

Conclusion

This case study aimed to identify characteristics of the Reggio Emilia philosophy in practice. Participating educators were asked to describe this philosophical approach in their own words. Overall, the themes determined from the participants' responses largely mirrored the tenets of the approach as described by Santín and Torruella (2017), with many responses underscoring the role of play as a central mode of learning and interaction in Reggio-inspired classrooms.

The most prevalent theme generated from the coded responses was **Child-centered**. We recorded 40 instances of codes contributing to this theme, including *child interests*, *respect for the child*, *support for the child*, and the *child is competent/capable*. The codes recorded under this theme reflect the fifth tenet of the Reggio Emilia philosophy, *Image of the Child*. According to Santín and Torruella's (2017) definition, the child is a "powerful, competent, creative, curious, full of potential and ambitious entity" (p. 53). This view positions children as active agents who shape their own play experiences, using play to explore ideas and construct knowledge. As Dodd-Nufrio (2011) notes, the Reggio Emilia classroom is "an environment that allows the child to be a producer of culture and knowledge – the child is a knowledge maker" (p. 236). Participants described play, particularly self-directed play, as a key avenue for children to express agency, test ideas, and engage deeply with peers and materials.

Another theme participants identified was **Learning from the environment**, with 16 code instances. Codes included *'natural environment' and 'environment' as the third teacher*. This theme corresponds with the first tenet of the Reggio Emilia philosophy, *The Environment as the Third Teacher*, which holds that "teachers organize the space in a way that is inviting for students to explore, experiment and investigate" (Santín & Torruella, 2017, p. 53). In practice, this often translates into environments

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designed for open-ended, playful exploration—such as loose parts, natural materials, and outdoor spaces that invite imaginative play and collaboration. The philosophy's socio-constructivist foundation supports this connection, emphasizing that "both children and adults co-construct their knowledge through interactions with people and the environment" (Dodd-Nufrio, 2011, pp. 235–236). Nature-based play, in particular, was seen as promoting a sense of belonging and community connection (Omidvar et al., 2019).

The third theme, **Documentation**, included 10 instances of codes such as *Documentation* and *reflection*. This theme aligns with the seventh tenet of the Reggio Emilia philosophy, where Documentation serves as a way to "present and represent the experiences, thoughts and ideas of the students and to showcase their learning processes" (Santín & Torruella, 2017, p. 53). Participants often described documenting children's play as a way to deepen learning—using photographs, transcripts, and artifacts from play episodes to revisit ideas, extend narratives, and make children's thinking visible. Hart (2006) emphasizes that in the Reggio approach, Documentation not only records the history of a project but also guides play-rich learning experiences.

Inquiry, the fourth theme, had nine code instances (*inquiry/inquiry-based* and *explore and experiment*). These playful investigations often began as spontaneous interactions with materials or environments and evolved into structured explorations or collaborative problem-solving. Inan, Trundle, and Kantor (2010) confirm that the Reggio approach is "grounded in inquiry, values play, embraces a constructivist and social-constructivist approach to teaching and learning" (p. 1187–1188). Play provided a natural context for posing questions, testing hypotheses, and refining ideas through trial and error.

The fifth theme, **Observation**, emerged from codes such as *'observation'* and *'teacher-researcher'*. This theme corresponds with the fourth tenet of the Reggio approach, which emphasizes that "the teachers' role is not reduced only to provide information to students, but to listen, observe and to document the work of children" (Santín & Torruella, 2017, p. 53). In participants' descriptions, Observation often took place during play, as teachers used children's play behaviors, conversations, and

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problem-solving strategies to understand their thinking and plan future experiences. This data aligns with Hart's (2006) framing of Observation as part of a reflective process that is integral to supporting rich, playful learning environments.

The sixth theme, **Collaboration**, was associated with codes such as *learning with others* and *communication*. This theme reflects the eighth tenet, *Social Relations*, which positions children as active social actors in co-constructing knowledge (Santín & Torruella, 2017). Participants described play as a powerful context for collaboration, from negotiating game rules to building a shared structure or acting out a story together. Such collaborative play fosters communication, empathy, and teamwork—skills essential for lifelong learning.

Finally, **Community**, the seventh theme, was associated with *community involvement* and *cooperation among teachers, children, and families*. This data aligns with the Reggio view of education as a community-based philosophy (Hart, 2006). Participants noted that play-based projects often incorporated family and community engagement, blurring the lines between classroom and home and reinforcing learning as a shared, relational process. Involving families in children's play experiences also reflects the philosophy's emphasis on respect for parents as partners in the educational journey (Altan, 2019; Yıldız & Durmuşoğlu, 2018).

Across all themes, participants' descriptions reinforced that play was not an optional activity but an integral process in Reggio-inspired environments—an avenue through which children explore, question, collaborate, and connect with others. These findings affirm that play in Reggio contexts is deeply purposeful, blending joy, creativity, and inquiry to support holistic development while honoring children's rights under Article 31 of the United Nations Convention on the Rights of the Child.

This study addressed the research question, "How do Reggio practitioners define the Reggio-inspired approach?" An analysis of the participants' descriptions of the Reggio Emilia approach revealed seven distinct themes. These themes are *Child-centered*, *Learning from the environment*, *Documentation*, *Inquiry*, *Observation*, *Collaboration*, and *Community*. While each theme relates to one of the eight core tenets of the Reggio approach (Santín & Torruella, 2017), three tenets were not represented in

the participants' responses. The tenets of the Reggio Emilia philosophy not expressed in these final themes were *100 Languages of Children*, *Long-Term Projects*, and *Negotiated Learning*. Future research could explore why these three tenets were absent from participants' descriptions of their Reggio-inspired practices and whether Reggio-inspired educators understand or implement them less consistently.

Limitations

One limitation of this study is that the collected demographic data did not include participating teachers' locations. Although the questionnaire was designed in English, this does not indicate that the participants teach in English-speaking schools. Because it was disseminated online, the questionnaire may have been accessible to an international audience. Additionally, the demographic data did not capture the ages of the participating teachers. Collecting this demographic information could have shown the prevalence of the Reggio-inspired approach across age groups, education level, years of experience, and regions.

Clinical Implications

This study aimed to identify teachers' perspectives on the Reggio Emilia philosophy and examine how they enact this approach in practice. Seven key characteristics emerged—Child-centered learning, Learning from the Environment, Documentation, Inquiry, Observation, Collaboration, and Community—each reflecting play's central role as a medium for exploration, meaning-making, and relationship-building.

The findings provide a practical framework for educators, administrators, and teacher trainers seeking to design and sustain environments that honor children's right to play. By recognizing play as the primary context for Reggio-inspired learning, educators can intentionally create spaces and experiences that support autonomy, creativity, and collaboration. Documentation and Observation of play can guide curriculum decisions, while environments rich in natural, open-ended materials can extend opportunities for inquiry and imagination.

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For professional development, these results highlight the importance of preparing educators to facilitate play-based learning that is child-led yet skillfully scaffolded, ensuring that play retains its integrity as a joyful, self-motivated process. Beyond the classroom, the study underscores the need for policy-level advocacy to protect and promote children's right to play, as articulated in Article 31 of the United Nations Convention on the Rights of the Child.

In alignment with the International Play Association's mission, these findings reinforce that play is not an "extra" but an essential component of quality early childhood education. Embedding play deeply into practice is both an educational imperative and a matter of upholding children's rights.

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Phenomena-Based Play in the Outdoors

Brian A. Stone, EdD

Introduction

Outdoor play is essential to a healthy, well-balanced life. When children have regular opportunities to explore, wonder, create, imagine, and authentically play in outdoor settings, they benefit across multiple domains, including physical health, social interaction, emotional regulation, executive functioning, and sustained attention (Yogman et al., 2018). Much of the research suggests that time outdoors tends to increase physical activity, build imagination and creativity, and support whole-child development. However, today's competing indoor/screen routines often displace or diminish those gains (Larson et al., 2019).

A key advantage of outdoor play is the meaningful opportunity it provides to interact with real-world phenomena, events, or patterns that students can observe and explain (e.g., water flowing downhill, shadows shifting, ice melting, leaves falling, insects foraging, or wind moving objects). The Next Generation Science Standards (NGSS) define *phenomena* as occurrences in the natural or designed world that students can explain or predict using scientific knowledge (NGSS Lead States, 2013). Anchoring learning in such phenomena is central to three-dimensional science because it invites sense-making through practices, core ideas, and crosscutting concepts (Achieve & Next Gen Science Storylines, 2016).

This paper uses the term Phenomenon-Based Play to describe child-led, unstructured outdoor play that naturally centers on such phenomena without adult-imposed objectives. In contrast to classroom-based Phenomenon-Based Learning (PhBL), where a teacher selects an anchoring phenomenon to guide instruction, Phenomenon-Based Play relies on discovery and the child's curiosity to drive observation, prediction, testing, and revision of ideas. Research on anchoring phenomena underscores why play provides a critical opportunity for children to engage with the world around them. Authentic anchors are observable, compelling, too complex to explain in a single step, and rich enough to elicit children's questions and investigations (Penuel & Bell, 2016). These are properties that are abundant in everyday

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outdoor contexts. Children need plenty of time and exposure to these "anchors" through their play.

Phenomenon-Based Play represents a powerful, practical response to an overly digital world. By protecting unstructured time outside and resisting the urge to push adult objectives, we preserve children's innate curiosity to meet a world rich with observable phenomena. The result is playful inquiry that builds scientific sense-making while simultaneously supporting the whole child in fostering children who are physically active, socially connected, emotionally resilient, and deeply interested in how the world works.

Problem Statement

Despite these benefits, outdoor play is declining, as is play in general. Gray (2011) suggested that outdoor play had been declining for the past 50 years because of cultural shifts in Western society, and he made this claim only a few years after the release of the first iPhone (2007). Since then, personal technology has been rapidly adopted across the country. Nearly two-thirds of American children have their own smartphone by age 10, and by age 13, as many as 99% of American children own or regularly access a smartphone (Stephens, 2025). With the rise in personal technology, the prevalence of short-form entertainment, and the continuous, instant access that children have to the world's information, children are far less likely to spend significant time playing outside (Larson et al., 2019; Andjić & Ivić, 2023; Tremblay et al., 2021; Kar et al., 2025). They are far more likely to spend time watching YouTube, TikTok, or other social media than to be playing (Stephens, 2025).

When coupled with the high cost of living, rise in dual-income homes (i.e., two working parents), and the hustle culture that dominates adulthood, it is often easier for parents to let their children spend hours on a device within the safe confines of their home rather than to allow or encourage their children to spend time playing outside (Boxberger & Reimers, 2019; Bhutani et al., 2025; Zong et al., 2024).

Therefore, when children have fewer opportunities to play outside and the overall value and time for play is diminished, children will lack the critical foundational benefits

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provided by play. Furthermore, children who do not regularly play outside will miss meaningful opportunities for outdoor inquiry, exposure to natural and designed scientific phenomena, exploring and investigating their world, and building an identity as an explorer, scientist, and engineer. The loss of imaginative and playful inquiry harms not only the future health and success of the child who spends time cooped up indoors in front of a screen, but also the health of our society as a whole.

Background

Phenomenon-Based Play allows children to interact with scientific phenomena through the natural engine of curiosity, fostering a sense of wonder about the world around them. This concept is an innovation of the previously mentioned classroom strategy, Phenomenon-Based Learning (PhBL), in which students explore real-world, observable events through instructional units in a standards-based classroom. In PhBL classroom settings, the teacher often selects the phenomenon (called anchoring), which is typically complex and requires interdisciplinary and critical thinking skills to unravel the concepts driving it (Fields & Kennedy, 2020; Penuel & Bell, 2016). Instructional PhBL is frequently driven by inquiry or questioning strategies in the classroom. The teacher uses the phenomenon to get children to ask the right questions needed to understand multiple, complex scientific concepts.

However, in Phenomenon-Based Play, children are naturally exposed to phenomena (typically outdoors), observable events in the world that they can use scientific knowledge to explain or predict (NGSS, 2016). This happens effortlessly through play, and it is important to note that there is no teacher or adult to guide the learning process. This is free, unstructured, child-led play in outdoor settings that exposes children to scientific phenomena through explorations in which they observe an event or object and then playfully engage with it through their own authentic inquiry. The "anchoring," instead of being a purposeful selection by a teacher, is the organic, happenstance discovery of something that captures the child's attention and interest. Then, through curiosity, the child interacts with the phenomenon, often by poking, prodding, digging, and generally experimenting. The child engages in high-level scientific processes without adult interference, formal instruction, objectives, or

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extrinsic rewards (such as grades). They will playfully engage because they are interested and curious.

When children investigate these outdoor events or anchors through play, they spontaneously engage in scientific thinking (e.g., asking questions, modeling, planning and carrying out tests, analyzing cause-and-effect). Beyond inquiry, the broader benefits of outdoor play are well documented. Systematic reviews and large studies find links between outdoor time and healthier activity profiles, social skills, and connection to nature (Hinkley et al., 2018; Lee et al., 2021); conversely, escalating screen time is associated with less outdoor time and weaker nature connectedness in youth. Importantly, these trends are not evenly distributed. Girls and some racial/ethnic groups report less outdoor time and more screen time, highlighting equity considerations for access (Larson et al., 2019).

At the same time, opportunities for outdoor play have declined due to cultural, environmental, and technological shifts. More structured time, safety concerns, urban design barriers, and the growing pull of screens have led to the long-observed decrease in free outdoor play. In turn, this has been linked with broader concerns for children's mental health and autonomy.

Appropriate Approaches/Strategies

In order to understand what Phenomena-Based Play could look like, imagine a young girl wandering through a wooded area after a night of rain. While jumping over a log, the child observes a small stream of water trickling downhill, carrying bits of leaves and dirt. For the child, who is perhaps on a walk with her parents, this is an unexpected discovery. The phenomenon captures the child's attention, and the parents allow a break in the walk for the child to investigate.

Curious, the girl sits beside the stream and begins placing sticks, leaves, and pebbles into the flowing water. These self-chosen, playful actions also reflect a scientific process born of curiosity. No one makes her do it or teaches her through it. She is naturally drawn to engage in this activity. She observes what floats or sinks, what gets stuck, and how the water changes direction around the objects. She pokes at the water

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with her fingers and experiments by digging tiny channels, observing how the stream splits, slows, or speeds up.

Without realizing it, the child is engaging in high-level scientific thinking, including:

- predicting what might happen if she moves a stick across the stream
- observing how water flow changes with obstacles
- comparing how different materials behave in water
- testing ideas, revising them, and trying again
- developing foundational conceptual knowledge about the properties of water

This process is embedded in the child's play. She does not know, or even care, that she is engaged in what adults call three-dimensional science, or Phenomenon-Based Learning. She engages because she chooses to, and because it is enjoyable. Furthermore, there is no teacher, or instruction, or goal; there is just the child's authentic, self-driven inquiry into a natural event. The "anchoring event" was simply the happenstance discovery of moving water, and all scientific engagement emerged organically from the play itself. This approach is highly congruent with Discovery Learning, an active learning strategy in which learners construct knowledge through experience, inquiry, and problem-solving. According to Kaiser et al. (2018), the self-generation of knowledge that is a hallmark of Discovery Learning and Phenomena-Based Play can activate deeper thinking and improve long-term memory when compared with the passive reception of information (teacher-directed instruction). Therefore, a play-based, discovery approach is highly beneficial for children to construct their own understanding through their self-chosen, playful experiences.

Approaches to maximize Phenomena-Based Play opportunities include intentionally decreasing screen time and exposure to short-form entertainment. Furthermore, parents and educators should dramatically increase the amount of time children spend outside (whether it is in urban parks or rural wooded areas). To create meaningful opportunities for Phenomena-Based Play, adults should rarely, if ever, bring instructional goals or objectives into outdoor settings. Even if a teacher-directed goal is planned for an outdoor activity, adults should always provide ample time for children to

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explore, investigate, and play freely. With more time outside, children have more chances to encounter phenomena and engage in natural, playful interactions.

Conclusion/ Recommendations

Children need less screen time and more play time. They need frequent, sustained time outdoors. They need less direct instruction and more self-generation of knowledge through experience. Teachers will always have a role. Children are not going to "discover" or "self-generate" terminology, but that transmission of knowledge can always come after or alongside experiences as they are built by children. Curiosity is a powerful driving force shared across humanity. Adults need to value this force and provide time for children to explore through their play.

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Design for Play in Early Years

Mugdha Thakurdesai, MArch

Introduction

Curriculum-driven planning has led many schools to adopt conventional classroom-based layouts as a standard architectural response for all age groups, including early years education. This one-size-fits-all approach overlooks the unique developmental and psychological requirements of children aged 0–6. Learning environments that rely heavily on enclosed classrooms and rigid spatial definitions often inhibit play, exploration, and movement, thereby reducing their effectiveness in supporting holistic development. There is a clear need to move away from static, classroom-centric models towards learning environments that are flexible, mobile, and responsive—spaces that enable young children to navigate, explore, and engage with their surroundings as integral parts of the learning process.

Problem Statement

To follow a specific curriculum, most schools provide traditional classroom setups as the architectural solution for all age groups across the school. This includes the early years. Given this age group's specific needs for growth and psychological development, confining young minds to classrooms or highly structured spaces creates environments that are ineffective for their development. This approach needs to change so the design supports children's flexibility and mobility within the learning premises.

Background

India—the world's most populous country with a rapidly growing economy—faces a significant challenge in providing quality learning environments for early years education. While policy frameworks such as the *National Education Policy 2020* (Ministry of Education, 2020) and the *National Curriculum Framework for the Foundational Stage* (NCERT, 2022) emphasize foundational learning and holistic development, infrastructure often falls short of age-appropriate needs.

Across urban and rural areas, early childhood centres are proliferating rapidly, particularly in cities. However, many operate out of single-family homes or commercial

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buildings never designed with young children in mind. Such spaces typically lack dedicated play areas and developmentally focused learning environments, limiting opportunities for movement, exploration, sensory experiences, and social interaction—all foundational to early childhood development.

Strategies: Appropriate Approaches

In the Indian context, early childhood learning environments are shaped by high-density urban conditions, limited land availability, climatic extremes, and diverse socio-cultural practices. Many early years centers operate in repurposed residential or commercial buildings, often with limited access to dedicated outdoor play areas. As a result, conventional models of large, open playgrounds are frequently impractical. This requires rethinking how play-based learning environments are spatially conceived and implemented.

While theories of play and cognitive development, such as those proposed by Piaget (1962), remain universally relevant, their architectural translation must respond to local realities. In India, outdoor learning environments are often most effective when designed as a network of semi-outdoor and transitional spaces rather than expansive open grounds. Courtyards, verandahs, shaded spill-out zones, terraces, and covered walkways can collectively function as active learning landscapes that support exploration, movement, and socio-emotional interaction while protecting against heat, monsoon rains, and environmental pollutants.

These spatial strategies are deeply rooted in traditional Indian architectural typologies such as the courtyard and the verandah, which historically functioned as spaces for social interaction, informal learning, and play. Reinterpreting these familiar typologies in contemporary early childhood settings helps learning environments remain culturally resonant while supporting modern pedagogical objectives. Such spaces encourage child-led exploration, peer interaction, and imaginative play, reinforcing the notion of children as active participants in their learning process.

From a design perspective, zoning outdoor and semi-outdoor areas to support varied play behaviours—functional, constructive, and symbolic (Frost, 1992)—becomes a critical strategy. Even within constrained sites, intentional layering of play zones can

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support diverse learning outcomes. Gross motor development can be supported through climbing, balancing, and movement-based activities, while fine motor skills can be enhanced through tactile experiences such as sand play, gardening, water play, and interaction with natural materials (Fjørtoft, 2004). Undefined or flexible spaces often emerge as powerful catalysts for imaginative and collaborative play, enabling children to negotiate, cooperate, and build social relationships.

This approach also challenges the conventional hierarchy that positions indoor classrooms as the primary learning environments. In early childhood education, where learning is predominantly play-driven, indoor spaces can be reconceptualised as extensions of the outdoor learning landscape. Indoor environments function as specialised ateliers—spaces for construction, storytelling, role-play, creative arts, and music and movement—complementing and reinforcing learning experiences initiated outdoors. This "out-to-in" framework aligns with India's climatic and cultural context, where learning and social interaction have traditionally flowed seamlessly between interior and exterior spaces.

By adopting context-responsive, play-based design strategies, early childhood learning environments in India can move beyond space limitations and infrastructural constraints to create holistic, scalable, and culturally grounded settings for early learning. This approach aligns with national educational priorities that emphasize experiential learning and the integrated development of physical, cognitive, and socio-emotional skills in the early years.

Recommendations for Early Childhood Learning Environments

1. Establish Play-Based Learning as a Spatial Driver: Design guidelines for early years must explicitly recognise movement, exploration, and play as core modes of learning.
2. Establish Minimum Semi-Outdoor Learning Requirements: Where open playgrounds are not feasible, designate semi-outdoor spaces as mandatory learning areas, not ancillary amenities.

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3. Integrate Indigenous Spatial Typologies: Courtyards should serve as learning cores; verandahs as transitional play zones; and shared open spaces as community-oriented learning areas.
4. Optimize Space Use in Urban and High-Density Contexts: Activate terraces, ramps, rooftops, and multi-use zones to create layered play opportunities within compact sites.
5. Balance Safety with Risk-Based Play: Adopt age-appropriate risk through scaled elements, natural surveillance, and material choices, rather than relying too heavily on barriers and padding.
6. Embed Nature and Sensory Learning: All early years centres should incorporate at least one nature-based learning component, such as a grow garden, a sand- and water play zone, or a tactile landscape element.

Conclusion

The design of early childhood learning environments must be fundamentally reoriented towards play-based learning as the primary spatial and pedagogical framework. Early years facilities should move away from rigid, classroom-centric models and adopt flexible, landscape-based learning environments that support movement, exploration, and child agency. Prioritize the integration of semi-outdoor and transitional spaces to ensure climatic responsiveness and year-round usability, particularly in dense urban contexts.

Design frameworks must draw from indigenous spatial typologies, embed nature and sensory experiences as integral learning tools, and allow for adaptability across varying site constraints. Importantly, early years environments should balance safety with opportunities for risk-based play, enabling holistic physical, cognitive, and socio-emotional development. Aligning these design approaches with national education priorities will ensure that early childhood learning environments are scalable, culturally grounded, and developmentally appropriate, laying a strong foundation for lifelong learning.

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1001 Pathways to Learning Through LEGO® Play Pedagogy: Play as a Vessel for Justice and Belonging

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Introduction

Play is the oldest, most enduring, and most generative learning relationship humans establish with the world. For this reason, play should not be reduced to an activity squeezed into "free time"; rather, it is the child's (and indeed the human being's) way of making meaning of the world, building relationships, structuring thought through trial and error, and expressing the self. This perspective requires that we treat play not merely as a pedagogical method, but as a foundational ground for the nature of learning itself (Tuğrul, 2017, 2019, 2024).

Children's play is recognized internationally as a right. Article 31 of the United Nations Convention on the Rights of the Child guarantees the child's right to rest, leisure, play, and to participate in age-appropriate recreational activities (United Nations, 1989). This framework reminds us that the right to play is connected not only to well-being, but also directly to learning, development, and participation. At the same time, it positions play as inseparable from creativity, imagination, self-regulation, social negotiation, and participation in cultural life (NAEYC, 2022). Key frameworks in early childhood literature and child health strongly emphasize play's role in cognitive, socio-emotional, and self-regulation development (Ginsburg, 2007). Clinical reports from the American Academy of Pediatrics further demonstrate that play deprivation poses risks to children's health, attachment relationships, and motivation to learn. Play is indispensable for healthy child development (Yogman et al., 2018).

This White Paper approaches the pedagogical value of play through the lens of LEGO® Play Pedagogy (Learning through Play) and argues that play is not the opposite of learning, but learning itself. Within this approach, the educator's role is redefined not as "managing" but as opening space; assessment is understood not as measuring products, but as making thinking processes visible. The text offers concrete examples of how this becomes possible through an approach that generates many possibilities with a

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limited number of materials. In doing so, play is addressed not merely as a classroom preference, but as part of how school and learning are positioned-and as part of broader debates on justice and access.

Problem Definition and Key Challenges

In recent years, children, beginning in early childhood, have been systematically distanced from play; as institutional schooling expands, play is pushed into an increasingly narrow space. In many contexts, play is still framed as a reward, a break, or the opposite of "serious" learning—making it difficult for the idea that play is the language of learning to gain pedagogical legitimacy. This shift in perception moves play outside learning rather than integrating it into learning goals; it weakens children's cycles of curiosity, experimentation, risk-taking, and trying again. However, a strong body of scientific evidence shows that, during play, children naturally develop higher-order skills such as planning, problem-solving, self-regulation, and social negotiation (Feyman et al., 2021; Güneş et al., 2019, 2020).

A second challenge is the growing pressure toward academicization and standardization in early childhood. Crowded classrooms, rigid schedules, narrowing assessment expectations, and the excessive valorization of early academic performance make it difficult to position play as a sustainable classroom learning approach. This pressure does not arise solely from structural school conditions; it is also reinforced by families' tendency to interpret schooling primarily in terms of academic outcomes. This climate creates a cultural frame that codes play as "wasted time." At precisely this point, the right to play goes beyond being a pedagogical choice and becomes an obligation grounded in children's rights and developmental needs.

Third, teacher self-efficacy and the ambiguity of pedagogical mediation come to the fore. Even when many teachers believe in the value of play, they may feel insufficiently prepared to accompany play without disrupting it, deepen play, ask productive questions, know when to step back, and collect qualitative data from play processes-and they may lack systematic support. Because the impact of play-based learning is often context-sensitive and process-oriented, evidence of play becomes invisible in systems dominated by short-term, standardized measurement tools (Zosh et

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al., 2017). This invisibility reproduces doubts about play's pedagogical value and creates a vicious cycle.

Two contemporary "extremes" further deepen this cycle. On one end, consumer culture increasingly shapes childhood. Abundant toys, fast boredom cycles, and the normalization of "more" may flatten rather than enrich the quality of play. "More objects" does not always mean "better play"; some studies show that with fewer toys, children sustain attention longer and deepen their play. As consumer-oriented childhood turns play into a consumed product, capacities for producing, transforming, rebuilding, and patiently experimenting may weaken (Dauch et al., 2018).

On the other hand, inequality and access remain a major problem. For children who cannot access toys, books, quality education, or safe play spaces, the issue is not the quality of play but whether play is possible at all. UNESCO and UNICEF's work on early childhood education emphasizes that inequalities in access at early ages directly affect lifelong learning opportunities and developmental equity. In this context, play pedagogy should be considered not only as a classroom method, but also as an area related to pedagogical justice and children's rights.

Finally, debates about digital intensity and technological dependence widen the distance from tangible play. Excessive early screen exposure may pose risks for attention regulation, self-control, and the development of executive functions. Moreover, rapid feedback and ready-made stimulation cycles can make it harder for children to enter a deeper flow of play. This makes play with open-ended materials grounded in "hands-on and minds-on" experiences even more critical (Christakis, D. A., 2019; McHarg, G., & Hughes, C., 2020).

The core claim of this White Paper is as follows: LEGO® Play Pedagogy does not offer a "miracle solution" to these diverse clusters of problems on its own; rather, it can respond as a scalable network of inspiration that re-legitimizes play, strengthens teacher mediation, makes processes visible, and enables the creation of many possibilities with limited materials.

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Background

A Theoretical View of Child-Centered Play-Based Learning Through LEGO® Play Pedagogy

The theoretical foundations of LEGO® Play Pedagogy are grounded in constructivist and constructionist learning approaches. These approaches argue that knowledge is not transmitted from outside; individuals actively construct it through experience, trial, and interaction (Piaget, 1972; Bruner, 1966). Seymour Papert's constructionism emphasizes that the deepest learning occurs while "making something" (Papert & Harel, 1991). While Piaget's cognitive constructivism emphasizes that children actively construct knowledge, Vygotsky argues that play provides a developmental arena that deepens learning through social interaction and language (Vygotsky, 1978).

LEGO® Play Pedagogy treats these theoretical approaches not as opposing but as complementary, positioning play as a holistic learning process across cognitive, social, and cultural dimensions. Considering the structural, pedagogical, and cultural barriers facing play-based learning, LEGO® Play Pedagogy holds significant transformative potential for education systems. The approach repositions play as a pedagogically legitimate pathway to learning, supports teachers' pedagogical self-efficacy, and makes the child's role as an agent in the learning process visible. In this respect, play-based learning can be understood not only as an in-class method but as a pedagogical paradigm that requires education systems to be rethought holistically.

LEGO® Play Pedagogy offers an integrated framework that moves play from an activity pushed outside education systems to the center of learning. In this framework, play is not limited to cognitive outcomes; it is a learning space that supports foundational components of lifelong learning, such as socio-emotional development, self-regulation, collaboration, cognitive flexibility, and problem-solving. Play, learning, and development are connected through a multidimensional, reciprocal relationship; play pedagogy places this relationship at the center of the learning process (Mardell, Ryan, et al., 2023).

In play-based learning environments, children experience error as a natural part of learning; they learn to take risks, try, and try again within a safe context. LEGO®

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Play Pedagogy provides concrete experiences that make visible what children think and how they think. Here, the focus is not on reaching the "correct" outcome but on producing meaningful learning experiences. Play is positioned not as the opposite of learning but as learning itself, and the child is accepted as the active subject of the learning process. LEGO® Play Pedagogy is based on a constructivist view that recognizes children not as passive recipients of knowledge but as agentic actors who are curious, make mistakes, try again, and actively construct meaning (LEGO Foundation, 2018). This proposal outlines a structured yet open-ended learning ecosystem.

Content developed within LEGO® Play Pedagogy is aligned with the 5E Instructional Model (LEGO Education, 2024). The 5E model—grounded in constructivist learning theory—consists of the stages: engage, explore, explain, elaborate, and evaluate. Learners can integrate new knowledge with prior concepts by understanding and reflecting on activities in depth. A constructivist approach requires educators to embed inquiry, exploration, and evaluation into instruction. This positions teachers as facilitators who guide learners while they actively learn new concepts (Lesley University, 2024). As a constructivist process that encourages learners to generate knowledge and meaning from experience, the 5E model also integrates with LEGO® Education's 4C approach: connect, construct, contemplate, and continue. Within this framework, learners can experiment and explore as they acquire new knowledge and are encouraged to collaborate on open-ended tasks (LEGO, 2024).

One core principle of LEGO® Play Pedagogy is structured freedom—the pedagogical balance between leaving play entirely unstructured and over-structuring it. Children are free within play; however, this freedom occurs within a consciously designed pedagogical structure that supports learning. In this context, the teacher's role is not to be an authority who controls play. However, the teacher is a pedagogical mediator who designs the learning environment, observes the process, and accompanies the child's meaning-making through play with sensitivity. In this way, play becomes a learning ecosystem that integrates academic learning and socio-emotional development (Mardell et al., 2023).

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During play, the child identifies problems, develops hypotheses, tries solution paths, makes decisions, collaborates, and regulates their own learning process. These processes contribute not only to learning content but also directly to "learning to learn" skills. The child is not a passive implementer following steps determined by the teacher; rather, the child is an active participant who influences the direction of play, makes decisions, and constructs meaning. This aligns with Tuğrul's (2024) view of play as a learning process that emerges from children's developmental needs and is shaped under children's leadership. In learning environments where the child is positioned as an agent, motivation becomes internalized; learning is grounded not in external rewards but in curiosity and discovery (Ngalonsa et al., 2024). LEGO® Play Pedagogy supports this internal motivation through open-ended materials and flexible learning environments, strengthening the child's active participation in learning.

Building processes with LEGO® enable children to test ideas, notice errors, develop alternative solutions, and try again. In this view, error is not something to avoid but a natural and valuable component of learning. Neuroscientific findings on play-based learning also support this approach (Liu et al., 2017). Play naturally activates executive functions such as planning, attention control, working memory, and cognitive flexibility (Diamond, 2014; Zosh et al., 2017). LEGO®-based play requires children to set goals, plan processes, generate solutions to problems, and shift strategies when needed. This turns learning into a durable and meaningful experience fueled by internal motivation rather than external rewards. LEGO® Play Pedagogy treats play not only as a fun activity but as a holistic learning environment in which children build thinking, planning, and abstract concepts through concrete representations (Resnick, 2017; Papert & Harel, 1991). A child playing with LEGO® makes their thinking visible with their hands; this visibility makes learning observable and pedagogically interpretable for both children and adults (Ackermann, E 2014). In this respect, LEGO® is positioned not as a tool of learning, but as a language of learning.

Key characteristics of LEGO® Play Pedagogy include open-endedness and a process-oriented stance. Open-ended play legitimizes not a single "right" answer but multiple solution paths, individual differences, and creative thinking (Tuğrul, 2017, 2025). A process orientation makes it possible to evaluate learning not only through the

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final product but through thinking steps, decisions, and interactions (Mardell, Wilson, et al., 2023). This helps learners recognize and regulate their own thinking processes.

LEGO® Play Pedagogy centers the learner's agency and enactment. The child decides what to build, how to proceed, and when to change course. This sense of agency turns learning into a personal, meaningful, and owned process (Ryan & Deci, 2000). The ability to express thinking through tangible materials facilitates children's self-expression, justification, and restructuring—particularly in early childhood. This strengthens not only the cognitive but also the emotional and relational dimensions of learning (Tuğrul, 2019, 2020). LEGO® Play Pedagogy does not limit learning to a single method; instead, it offers a flexible framework that enables multiple pathways to learning. Individual building processes, collaborative constructions, story-based narratives, problem-based scenarios, and sensory-kinesthetic experiences form different facets of this framework (Resnick, 2017; Project Zero, 2025). The metaphor of "1001 pathways to learning" is not a quantitative measure of abundance but a pedagogical expression that highlights the contextual, individual, and situational nature of learning.

In traditional educational settings, adults often occupy the center of the process; what will be done, how it will be done, and what is correct are predetermined. In LEGO® Play Pedagogy, this center shifts and the focus of learning becomes the child. In this context, the educator takes on a role that does not give instructions but asks questions; does not determine outcomes but observes processes; does not correct mistakes but makes meaning of them. This transformation deepens rather than diminishes pedagogical power. Expertise is grounded not in control, but in reading the process, intervening at the right moment, or deliberately stepping back (Resnick, 2017; Ackermann, E., & Gauntlett, D., 2009; Ackermann, E., 2014). "Opening space" refers to creating a learning environment where the child can safely bring forward thoughts, trials, and decisions. This environment must be physically accessible, emotionally safe, and pedagogically open-ended. An educator who opens space does not think for the child; they leave room for the child to think. The child's sense of being able to influence the process is a key determinant of internal motivation and engagement in learning (Ryan & Deci, 2000; Tuğrul, 2024, 2025). In LEGO® Play Pedagogy, assessment is not a separate action performed at the end of learning; it is an inherent component of the

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learning process. Assessment aims not to measure what the child produces, but to make visible how the child thinks, tries, gives up, and begins again, and to make sense of the process. For this reason, traditional measurement and assessment tools often respond only in limited ways to the nature of play pedagogy (Zosh et al., 2017).

Therefore, assessment in LEGO® Play Pedagogy is grounded in processes of monitoring and interpretation. The educator observes how the child begins, responds to challenges, changes ideas, interacts with others' ideas, and regulates learning. These observations provide qualitative data about executive functions, self-regulation skills, problem-solving strategies, and social interactions (Diamond, 2014; Zosh et al., 2017). Play pedagogy reminds us that learning, by its nature, cannot be standardized. Each child's learning pathway is different, and these differences should be treated not as problems but as assets in assessment. Thus, assessment in LEGO® Play Pedagogy is oriented not toward comparison, ranking, or labeling, but toward understanding and supporting. Assessment represents an ethical stance that makes strengths visible rather than a mechanism that identifies deficits (Tuğrul, 2017, 2019). In short, assessment in LEGO® Play Pedagogy is not about "trying to measure play" but about understanding the thinking processes that emerge through play. Learning is assessed not by numbers but by meaning.

Appropriate Approaches and Strategies

LEGO®, Six Bricks, ATAÇ, and 1001 Pathways to Learning: Building "More" with "Less"

The name LEGO® derives from the Danish phrase "LEg GOdt," meaning "play well." This naming positions play not only as enjoyable time, but as an integrated pedagogical understanding intertwined with learning, thinking, and producing. In LEGO® Play Pedagogy, "playing well" is not a random pastime; it refers to a high-quality learning process that makes room for trying, exploring, making mistakes, and rebuilding (LEGO, 2024).

A frequently cited concrete indicator of this philosophy is that six 2×4 LEGO® bricks of the same color can be combined in 915,103,765 different ways. The fact that six standard bricks can generate nearly a billion possibilities shows how rich, varied, and

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open-ended play and learning can be—even with limited materials. This number is not only mathematical data; it can also be read as a powerful pedagogical metaphor demonstrating that learning cannot be reduced to a single correct path or constrained to predetermined routes. Even with the same six bricks, the same child, and the same teacher, a different learning pathway can open each time. Six Bricks pedagogy and practices—often considered the "homeland" of this understanding—were developed within Care for Education in South Africa, and sources explicitly refer to Brent Hutcheson as the "inventor of Six Bricks." Hutcheson developed Six Bricks to create short, repeatable, structured play experiences using a small number of standard, accessible materials to support children's perceptual-motor skills, attention regulation, cognitive flexibility, and executive functions. Care for Education's official descriptions emphasize that Six Bricks is grounded not only in building, but also in an approach to learning that transforms thinking through knocking down and rebuilding (Care for Education, 2024a). Six Bricks localized its pedagogical framework in Türkiye through the ATAÇ: Altı Tuğlayla Az Çoktur project—developed with the coordination and academic consultancy of a group of academics and early childhood teachers—which became a pedagogical language and found widespread application in early childhood education. Implemented as an eTwinning project, ATAÇ's process has been made visible through teacher networks, workshops, and digital sharing platforms. The project's institutional digital traces appear on its official Instagram account, opened in January 2022, and in open-access video materials (ATAÇ: Altı Tuğlayla Az Çoktur, 2022). ATAÇ concretizes the idea of 1001 pathways to learning by reinterpreting the limited-material approach of Six Bricks through the philosophy of "building more with less." In the 2021–2022 school year, 346 guided games developed by 112 early childhood teachers across Türkiye's 81 provinces were played simultaneously with 2,047 children aged 4–6 (Tuğrul et al., 2022). Inspired by Six Bricks, the ATAÇ project offers an open-ended pedagogical framework that emphasizes that many games, learning experiences, and strategies can be created with a limited number of materials. The "few" bricks do not limit learning; instead, they strengthen children's creativity, flexibility, problem-solving skills, and active participation. In this respect, ATAÇ offers teachers a pedagogical compass to connect play to learning goals without reducing play to a purely instrumental activity for achieving teacher-defined outcomes. The same materials can

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serve different learning domains, such as attention regulation, executive functions, language and narrative, mathematical thinking, social negotiation, and creative problem-solving (Yaman, 2025). This demonstrates that learning occurs through multiple pathways and that the richness of learning experiences stems not from the quantity of materials used, but from how they are positioned and experienced (Yöndem, 2024; Güneş, 2019).

When LEGO®'s "play well" philosophy, the Six Bricks approach, and the hundreds of millions of possibilities supported by ATAÇ are considered together, it becomes more visible why learning through play is a powerful, sustainable, and universal pedagogical approach.

Conclusions and Recommendations

The primary recommendation is the re-legitimization of play in education systems—at both formal and cultural levels-as the language of learning rather than the opposite of learning. This is not merely a change in discourse; it requires redesigning time, space, and assessment mechanisms. The right to play and play-based learning should be positioned as a measurable priority in early childhood policies.

The second recommendation is to treat "accompanying play" as a distinct area of expertise within pre-service teacher education and in-service professional development. Rather than trying to manage play flow, teachers should design safe, accessible, open-ended spaces where play becomes learning; ask questions at the right time, step back at the right time, and interpret the process through observation and documentation. These competencies are core to the sustainability of play pedagogy.

The third recommendation is to shift assessment from product-focused measurement to process-focused interpretation. Observation, documentation, and the child's own narrative should be included as ethical and pedagogical tools in standard practice repertoires to make the learning value of play visible. This enables both teachers and families to read play as an evidence-based learning space.

The fourth recommendation is to strengthen the philosophy of "building more with less" in response to childhood experiences shaped by consumer culture and digital

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intensity. Creating rich thinking possibilities with limited but open-ended materials (e.g., ATAÇ) can support children's capacities for contentment, deepening, focus, patience, and creative problem-solving.

The fifth recommendation is to consider scalable micro-material approaches (such as the Six Bricks pedagogy) alongside access policies in contexts of inequality. To keep play pedagogy from becoming a privilege of high-resource environments, expand low-cost, replicable models. UNESCO–UNICEF's emphasis on access, quality, and equity in early childhood provides a key policy-level foundation for this strategy (UNESCO & UNICEF,2024).

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